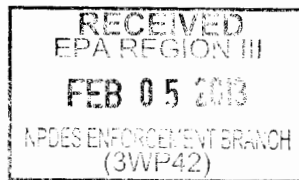




CITY OF READING, PENNSYLVANIA

CHARLES M. JONES
PUBLIC WORKS DIRECTOR



PUBLIC WORKS
503 N. 6TH STREET
READING, PA 19601
(610) 655-6236

January 30, 2013

Certified Mail
Return Receipt Requested

Ms. Margaret L. Hutchinson, Esq.
Assistant United States Attorney
Civil Division Eastern District of Pennsylvania
615 Chestnut Street
Suite 1250
Philadelphia, PA 19106-4476

Re: City of Reading Consent Decree
Calendar Quarterly Progress Report
4th Quarter 2012

Dear Ms. Hutchinson:

In accordance with Section VI Reporting Requirements, Paragraph 41, you will find enclosed the City of Reading's Calendar Quarterly Report. This report documents progress and status on the implementation of Section V Remedial Measures described in Paragraphs 7 through 40. Please feel free to contact me at 610-655-6236 should you have any comments or questions.

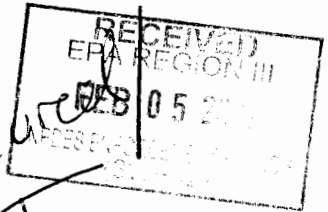
Sincerely,

Charles M. Jones, PE
Public Works Director

CMJ/ts
Enclosure

C: Christopher A. Day, Esq., US EPA
Lisa Trakis, US EPA
Edward J. Corriveau, P.E., PA DEP
Shawn Arbaugh, PA DEP
Carole Snyder, Managing Director
Deborah A.S. Hoag, P.E., Utilities Systems Manager
Ralph E. Johnson, P.E., Wasterwater Treatment Manager
Anthony C. Vesay, P.E., Hill International
Keith Mooney, Esq., Legal Counsel
John J. Miravich, Esq., Fox Rothschild
file





City of Reading Consent Decree
Quarterly Progress Report
Period Ending December 31, 2012

V. REMEDIAL MEASURES

A. General Duties

7. **Duty to Comply with Permit** – The City's wastewater treatment plant (WWTP) was in compliance with NPDES permit parameters.
8. **Operation and Maintenance of the Facility** – No change. The operation and maintenance ongoing program is implemented.

B. Interim Measures

9. **Interim Compliance – Environmental Management System**

(b) **Maintenance Management System** – No change. The WWTP computerized maintenance management system (CMMS) ongoing program is implemented.

(c) **Supervisory Control and Data Acquisition (SCADA) system**

1. **Upgrades to the Interim SCADA System** – No change. The WWTP SCADA system ongoing program is implemented.

2. **Upgrades to the SCADA System** – No change. This measure will be addressed under the Wastewater Treatment Plant upgrade.

(d) **Pretreatment Data Management System** – Continuing progress.

The City continues the use of a commercial pretreatment database as well as an abbreviated spreadsheet for simplicity and verification.

10. **Interim Plant Influent Monitoring** – No change. The plant influent monitoring ongoing program is implemented.

11. **Interim Trickling Filter Performance Measures**

(a) **Performance Improvements** – No change. The trickling filter performance measures ongoing program is implemented.

12. **Process Control Testing** – No change. The process control testing ongoing program is implemented.

13. **Dangerous Gas Detection** – No change. The gas detection ongoing program is implemented.

14. **Certified Plant Operators** – No change. The ongoing 24/7 qualified supervisor coverage is implemented.

15. **Operations and Maintenance Plan** – No change. The operations and maintenance plan remains in place and is annually reviewed and updated as appropriate.

16. **Staffing Plan** – No change. The ongoing 24/7 supervisor coverage is implemented. The ongoing communication process is implemented.

17. **Interim Wet Weather Operational Strategy** – No change. Please see the wet weather operation plan.

C. Long Term Evaluation and Construction Schedule – In addition to the wastewater treatment plant this remedial measure reporting includes activities associated with pump stations, force mains and 537 planning.

The 42" flow-meter replacement project is substantially complete. The purpose of the new flow meter(s) is to confirm the wastewater treatment plant's (WWTP's) flows and loadings. The new flow meter is tracking at approximately 3.5% lower than the existing Sixth and Canal Pump Station flow meter. Therefore, the flow and loading data used for the WWTP planning is confirmed to be reasonable. This \$2,958,000 project was financed with a combination of two \$500,000 EPA STAG grants and Sewer Fund/Bond reserves.

The City's PaDEP 537 Planning Special Study is complete. The project was financed with Sewer Fund/Bond reserves.

Construction has started on the City's new 42" force main (FM) project. Pending its condition, the existing FM is scheduled to be used for redundancy with limited lining of the river crossing only. Additionally, the failing section of the existing FM is being replaced. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System. The project cost is \$9,738,500 and is being financed with a \$5,000,000 H2O grant and a PennVEST loan. There is also a FEMA/PEMA Hazard Mitigation grant application submitted.

Additionally, the 42" force main (FM) emergency project that temporarily bypasses the failing section of the existing FM is completed. This is an interim measure to avoid leakage to the Schuylkill River. The \$1,840,000 emergency project contract was financed by Sewer Fund reserves.

The Sixth and Canal Pump Station (6&CPS) updated reevaluation is complete. As requested a summary description of this project was submitted. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

Weston Solutions follow-up 6&CPS ground and groundwater contamination studies are continuing.

Hazen and Sawyer 19th Ward Pump Station (19WPS) assessment, alternatives evaluation and capital improvements plan is complete. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

The Anaerobic Digester Rehabilitation project has been started at the wastewater treatment plant. T&M Associates, the selected engineer, completed the digesters' cleaning specification and the bids are being received in mid January 2013. The scope of the project is to clean the two secondary digesters and rehabilitate both. We will also modify one of these two secondary digesters so it can be converted into a primary digester as needed. There is a \$1,000,000 H2O grant available toward this rehabilitation project.

18. Treatment Plant Alternatives Submission

(a) **Existing Plant Process Evaluation Report** – The updated Existing Plant Process Evaluation Report was submitted as part of the 537 Planning Special Study.

(b) **Evaluation of Treatment Alternatives Report** – The updated Evaluation of Treatment Alternatives was submitted as part of the 537 Planning Special Study.

19. Capital Improvements Plan – The updated technical Capital Improvements Plan was submitted as part of the 537 Planning Special Study, and the financial Capital Improvements Plan was submitted as a separate document.]

20. Request for Proposals – The City sought proposals and hired Raftelis Financial Consultants to conduct the rate study and prepare a bond feasibility report.

The City received seven proposals in response to issuing a wastewater treatment plant designer request for proposals phase I. The City is in the process of short listing the proposers and seeking phase II proposals from the shortlisted potential designers.

21. Permit Applications and Design – No report.

22. Permitting – No report.

23. Construction Completion – No report.

24. Start-Up and Operation – No report.

D. Collection System

25. GIS Mapping System - In progress. See below.

(a) **Purpose of GIS System** - Not applicable.

(b) **GIS Mapping of the Sanitary Sewer Collection System** – In progress. Phase One of the GPS project is the larger diameter sanitary sewer system required for the hydraulic modeling with Phase Two the remainder of the sanitary sewer collection. The City continued investigating problem locations in Phases One and Two identified by Woolpert who then surveyed those locations that were able to be resolved. The final sanitary database was submitted for City review and approval. Based on the best available mapping prior to the project, Woolpert located 109% of the anticipated manholes yet only 94% of the total sanitary features were located and inspected. More manholes were located than expected yet in some locations the anticipated manholes are still being investigated. Further project details are in the attached report. The City prioritized the investigation required as many of these manholes are in

Phase One along the interceptors required to perform hydraulic modeling. The City has been using CCTV and magnetic locating as well as cross-referencing between the design plans, existing GIS, and aerial imagery. Two key longer stretches of the trunkline in rights-of-way along the railroad and Schuylkill River between Spring and Bern Streets were the main focus during this quarter with manholes presence or absence determined via CCTV followed by exploratory excavation for those existing. Woolpert will be returning in the first quarter to capture features that are now located and accessible.

(c) GIS Mapping of the Storm Water Collection System - In progress. The third phase for field data collection and GIS mapping is the storm water system. This is included in the new GPS contract discussed above. Woolpert began the mapping inventory of the storm water system in the first quarter and continued working with multiple crews during the second and third quarters to reach 81% of the anticipated features located and 98% of those inventoried. Anticipated features are estimated as the existing index maps do not indicate manholes and inlets in the system with actual counts varying greatly by basin from the estimated numbers. City crews worked to provide access as the crews move through the areas to reduce the follow-up required and have been working on the follow-up upon delivery into the tracking system.

26. Sanitary Sewer System Evaluation Program

(a) I/I Analysis by Subsystem

The City continued investigating and updating the mapping required for the coordination of the collection system investigative, modeling, and rehabilitative work.

1. Baseline Flow and Rainfall – In Progress. The hydraulic modeling of the interceptors is a key to re-evaluating priorities based on projected bottlenecks that may exist. The GIS inventory of the Phase One interceptors is required for this modeling.

2. Hydraulic Modeling – In Progress. The pilot and first phase of the GPS project discussed in paragraph 25(b) provide the information required for this hydraulic modeling. An enhanced scope of services to include this and other collection system engineering support is being developed to request proposals. The GPS Phase One necessary for the modeling is the area which has the most problems, especially with successive missing manholes. The City is continuing to research and locate manholes to be inventoried in preparation for the modeling. Most of these are located in unpaved rights-of-way along railroad tracks as discussed above. Feature numbering for unique identification will occur following the inventory. This is also required for the computerized maintenance management system discussed below.

(b) Sewer System Evaluation Survey – In Progress. The sanitary manhole numbering system is refined continually as field inventory show

additional or missing manholes and will continue as the inventory and system investigations progress.

The computerized maintenance management system implementation project progressed toward restarting full-scale for geospatially-oriented tracking of preventive and corrective maintenance as well as repairs. The City and Woolpert worked together on Cityworks software configuration for service requests, work orders, and projects to track personnel, equipment, materials, and contractors. The configuration is being set up to follow internal work flows and intradepartmental interfaces. Woolpert made software configuration updates with initial training scheduled for the first quarter. The software will be used in a test environment prior to going online in 2013.

After soliciting and evaluating proposals, the City awarded a contract to Woolpert to inspect and evaluate the sanitary sewer system's intermunicipal connection points and flow meters. Woolpert performed field investigation and observations at the points as determined through the Act 537 planning and intermunicipal agreement mapping processes.

27. Rehabilitation Plan – No progress. *The SSES is required to be complete in order to develop the Rehabilitation Plan.*

28. Rehabilitation of Priority Areas of Collection System – No progress. *The rehabilitation plan is the precursor of this.*

29. Wet Weather Operation Plan – Completed.

E. Pretreatment Program

30. General Duty – In progress. The City has an approved pretreatment program and continues to regulate industrial users in the collection system.

31. Enforcement Response Plan (ERP) Implementation – In progress. The City continues to follow the ERP in order to encourage compliance from all industrial dischargers.

32. ERP - Penalty Escalation and Compliance Schedule – In progress and continuing. The City continues escalating penalties for all industries that are in significant non-compliance for a given parameter for two consecutive quarters. As penalty escalation had not been detailed in the ERP, the City has documented the process and amounts for consistency and as a reference tool.

33. ERP – Order, Permit Revocation, and Federal Referral – In progress. The City continues escalating the enforcement actions focusing on the financial penalties assessed to permittees who remain in significant non-compliance. The City continues to confer with US EPA while attempting to have industries achieve compliance. One industry has been problematic for an extended time following completion of a recent compliance agreement. US EPA requested additional information from the industry and has been speaking with the City regarding this permittee's recent compliance. The City met with an industry representative in the first quarter to discuss recent compliance and plans for long-term attainment. During the second and third quarters, City and self-monitoring results yielded non-compliance was communicated to US EPA. A joint unannounced inspection of the industry was completed with US EPA the end of the third quarter. During

the fourth quarter, the industry completed the installation of an automated skimming system they believe will address their non-compliance. To date, this cannot be determined due to the limited monitoring completed. The City anticipates continued communication with US EPA.

34. Local Limit Adoption by Contributing Municipalities – In progress. All the municipalities with permitted industries have adopted the ordinance. Electronic versions of the City's sewer use ordinance had been provided to each municipality, engineer, and/or solicitor to prepare for adoption. This requirement is detailed in the revised intermunicipal agreement being reviewed and executed by the contributing municipalities.

35. Non-Residential Connection Evaluation and Investigation – In progress. The City has been working with the contributing municipalities to obtain this information to summarize, survey, and evaluate nonresidential users in the service area that may need to be permitted.

36. Increased Monitoring for Violators – In progress and continuing. The City continues to increase City sampling and encourage increased self-monitoring for frequent violators. In general, permits may be amended or re-issued requiring multiple resamples for parameters with prior compliance issues. Some permits require increased frequency of monitoring for multiple quarters of compliance prior to returning to a less frequent self-monitoring schedule. Additional monitoring by both the City and the industry is tracked and reported annually.

37. Pretreatment Computerized Management System - In progress and continuing. The City continues data entry into a commercial pretreatment database as well as an abbreviated spreadsheet upon receipt of analytical results from both City and industrial sampling.

38. Local Limits Re-Evaluation – Completed. Evaluation submitted to US DoJ and US EPA on May 5, 2006. Comments were received from US EPA and the City initially worked with B&V to address the comments and concerns.

39. Quarterly SNC Reports to US EPA – In progress. The City has been monitoring penalty payment status and will continue to investigate errors in the penalty payment and posting as reported to the US EPA. The City is working interdepartmentally to resolve this issue for the past and determine how to do ongoing with accurate tracking and reporting in all systems as the goal. There continue to be industries that are not current with their payment.

F. Funding

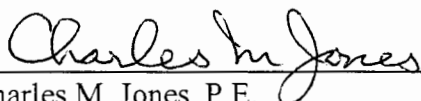
40. Funding – In progress. The 2013 budget was approved as presented to City Council with the budgeted transfer amount from the Sewer Fund to the General Fund remaining at \$3,000,000. In order to stabilize finances, this transfer will be taken periodically throughout the year.

VI. REPORTING REQUIREMENTS

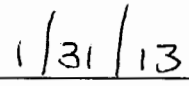
41. Report Contents and Certification

- (a) **Remedial Measures Paragraphs 7 through 40** – See above numbered sections.
- (b) **Anticipated Problems** – See italics in above numbered sections.
- (c) **Additional Matters** – See italics in above unnumbered sections.
- (d) **Certification Statement** –

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete.



Charles M. Jones, P.E.
Public Works Director



Date

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

October 2012

Executive Summary:

The PM/CM team continued work on Consent Decree related tasks as well as other supporting wastewater treatment plant (WWTP) tasks. Critical items of October work included: continued construction work on the Fritz Island Flow Meter and 42" Force Main project, continued design work on the secondary digester project, finalization of the 19th Ward Pump Station CIP, and the beginning of the procurement process to select a designer for the WWTP project. The PENNVEST loan for the Force Main project also closed during this reporting period.

Anticipated work for November includes: Amended Consent Decree/Act 537 Plan discussions with DoJ/EPA/PaDEP, receipt of qualifications from prospective designers for the WWTP project, advertising of a Request for Proposals for cleaning of the secondary digesters, continued construction work on the Fritz Island Flow Meter and 42" Force Main projects, and selection of a consultant to perform the rate study for the sewer program.

A more detailed task breakdown of the September work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- Act 2 Study at the 6CPS: reviewed sub-consultant's report and held discussions with the project team to refine the project approach.
- WWTP (design): received client guidance and reviewed/commented on sub-consultants Request for Qualifications to procure design services for the WWTP project; assisted with bidders list.
- Force Main (42"): Reviewed and commented on sub-consultants analysis of the contractor's schedule; continued to assist with construction-related project issues.
- 6CPS: reviewed, commented on sub-consultant's technical memorandum regarding the 6CPS's Oxidizer issue (per Consent Decree, Paragraph 18b4).
- 19th Ward Pump Station and Force Main: assisted sub-consultant in the finalization of the Capital Improvements Plan.
- Rehabilitation of Secondary Digesters: review scope of services and advise client regarding designer oversight responsibilities.
- WWTP Flow Meter project: assisted with the tracking, resolution of the project's action items, including editing of progress meeting minutes.
- Legal: participated in internal Municipality Agreement (IMA) and Amended Consent Decree strategy discussions/issues. Commented on the City's 10/26/12 response to DoJ's 9/14/12 letter.
- Project controls/administration functions: project team integration/correspondence/status, progress meeting attendance/coordination & preparation of meeting Agenda/Action Items (WWTP Updates), invoice/monthly

reports, PM/CM Tasks/Budget worksheet, and receive/respond to prospective vendor inquiries.

- Updated and submitted the project Draw Schedule, and began preparation of the WWTP and Collection System Project schedule for submission to the regulators.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: project schedule updates, PM/CM Tasks and Costs spreadsheet updates, document management, draw schedule updates, extranet site management, flow chart preparation, initial review of designer's secondary digester schedule and subcontractor coordination and invoice tracking log updates.

Grant Funding (DMGS: no invoice this period):

- No billings this period

Design Review/Tech Support (H&S: also see invoice):

- Provided project management and administration.
- Completed a technical memo on the current assessment of the 2006 Oxidizer Evaluation.
- Attendance at meeting on October 10th.

Act 537 Special Study (H&S: also see invoice):

- Provided hard copies of the Final Act 537 Special Study to the City.

Flow Meter Construction Management Services (Weston: also see invoice)

- Reviewed and provided comments on Shop Drawing submittals and RFIs prepared by Ronca.
- Onsite inspection and project management for full time monitoring of Flowmeter project construction activities by Ronca.
- Finalization and issuance of meeting minutes associated with Progress Meeting No. 5 at the WWTP in September 2012
- Correspondence, discussions and coordination associated with pipe thickness/condition evaluation for sections of steel force main removed during the construction/replacement activities.
- Prepared and issued a review of Ronca progress schedule update No. 7 in comparison to most recent update No. 8. Comparison assessment of schedule changes and potential effects since last schedule update and recommendations for inclusion in next version of the schedule.
- Investigated potential weld inspectors for verification of steel to ductile iron pipe connections.
- Prepared agenda and attended Progress Meeting No. 6 held at the WWTP and followed up with a site visit.
- Discussions with client and project team on the Flow Meter construction project; prepared, reviewed and responded to associated project correspondences.
- Project controls, budgeting, planning and reporting.

Force Main 42" Construction Management Services (Weston: also see invoice)

- Attended the Force Main Pre-Construction Meeting held in September. Associated preparation for said meeting.
- Reviewed and provided comments for Shop Drawing submittals prepared by PACT.
- Reviewed the contract drawings and specifications issued for construction to prepare for construction management inspections services.
- Reviewed contract requirements for schedule submissions. Reviewed and commented on schedule submitted by PACT.
- Discussions with client and project team on the Force Main construction project; prepared, reviewed, and compiled project correspondence.
- Project controls, budgeting, planning, and reporting.

19th Ward Pump Station Assessment (H&S: also see invoice):

- Revised and reissued the report to the City
- Project related review and research.

Act 2 Consulting & Support Services for 6CPS (Weston: also see invoice)

- Evaluation of pumping centers in the vicinity of the 6&CPS site and associated discussions with DRBC. Associated client and team discussions and issuance of formal correspondence to project team.
- Oversight of subcontractor surveyor services.

WWTP Designer RFQ (H&S: also see invoice):

- Developed draft of RFQ for the procurement of the WWTP designer.
- Coordination with the City, Fox Rothschild and PM/CM Team.

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

November 2012

Executive Summary:

The PM/CM team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of November work included: submission of the WWTP and collection system schedules to DoJ/EPA/PaDEP, receipt of qualifications from prospective designers for the WWTP project, advertising of a Request for Proposals (RFP) for cleaning of the secondary digesters, work on punch list items for the Fritz Island Flow Meter, continued construction on the 42" Force Main project, submission of a Report to the client regarding the contamination at the 6CPS site and the submission of the final report to the client for the 19th Ward Pump Station Capital Improvements Plan.

Anticipated work for December includes: discussions with DoJ, EPA, PaDEP regarding the amended Consent Decree, short listing of design firms and preparation of the design RFP for the WWTP upgrades project, a pre-bid meeting for prospective contractors on the secondary digester project, closeout of the Fritz Island Flow Meter project, and continued construction work on the 42" Force Main project.

A more detailed task breakdown of the November work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): finalize the scope for the designers Request for Qualifications (RFQ); review and comment on sub consultant's RFP scope.
- Force Main (42"): Continued to assist with construction-related project issues, including a review of sub-consultant's steel pipe inspection report.
- Fritz Island Flow Meter: Assisted with construction punch list items issues, including the disposition of the stockpiled soils; assisted with the analysis of the contractor's schedule.
- Rehabilitation of Secondary Digesters: review construction bid documents and perform an initial review of the designer's schedule.
- Act 2 Study at the 6CPS: reviewed sub-consultant's Act 2 Groundwater report and held discussions with the project team to refine the project approach.
- 19th Ward Pump Station: assisted with the finalization of the Capital Improvements Plan.
- Legal: participated in internal Municipality Agreement (IMA) and Amended Consent Decree strategy discussions/issues.
- Project controls/administration functions: project team integration/correspondence/status, progress meeting attendance/coordination & preparation of meeting Agenda/Action Items (WWTP Updates), invoice/monthly reports, PM/CM Tasks/Budget worksheet, receive/respond to prospective vendor inquiries and establish an ftp site to support the WWTP designer RFQ process.

- Reviewed the Draw Schedule and corresponded with the client regarding a feeder report for the Draw Schedule. Updated and submitted the WWTP and Collection System Project schedule for submission to the client and regulators.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: project schedule updates, PM/CM Tasks and Costs spreadsheet updates, document management, extranet site management, invoice tracking log updates, and secondary digester bid document support.

Grant Funding (DMGS: no invoice this period):

- No billings this period

Primary Digester Design Support Services (H&S: also see invoice):

- Reviewed the proposed bid documents and provided technical comments.

Flow Meter Construction Management Services (Weston: also see invoice)

- Onsite inspection and project management for full time monitoring of Flowmeter project construction activities by Ronca.
- Finalization and issuance of meeting minutes associated with Progress Meeting No. 6 at the WWTP in October 2012
- Correspondence, discussions and coordination associated with the management and sampling of the stockpiled soils. Preparation of the associated summary report and recommendations memorandum.
- Coordination for the transportation and disposal of stockpiled soils. Review and evaluation of associated Change Order prepared by the contractor.
- Coordination and correspondences related to the pipe thickness/condition evaluation of steel force main sections removed during construction/replacement activities. Preparation of technical memorandum summarizing the existing steel pipe inspection services performed to date.
- Review of Ronca Schedule Update No. 9 and preparation of comments.
- Discussions with client and project team on the Flow Meter construction project; prepared, reviewed and responded to associated project correspondences.
- Project controls, budgeting, planning and reporting.

Force Main 42" Construction Management Services (Weston: also see invoice)

- Onsite inspection and project management for part time monitoring of Force Main construction activities by PACT.
- Preparation for and attendance at Force Main Progress Meeting No. 1.
- Review and comment on Pre-Construction Meeting Minutes.
- Reviewed and provided comments for Shop Drawing submittals and pay applications prepared by PACT.
- Reviewed and commented on second schedule submission made by PACT.
- Discussions with client and project team on the Force Main construction project; prepared, reviewed, and compiled project correspondence.

- Project controls, budgeting, planning, and reporting.

19th Ward Pump Station Assessment (H&S: also see invoice):

- Revised and issued final report to the City
- Project related review and research.

Act 2 Consulting & Support Services for 6CPS (Weston: also see invoice)

- Preparation, review, and project team discussions associated with the technical memorandum for first groundwater elevation monitoring.

WWTP Designer RFQ (H&S: also see invoice):

- Finalized the Phase I RFQ document to be used to assist in the procurement of the WWTP designer.

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

December 2012

Executive Summary:

The PM/CM team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of December work included: review of designer qualification packages for the WWTP design, commencement of the design RFP for the WWTP upgrades project, a pre-bid meeting for prospective contractors on the secondary digester project, continued work on punch list items for the Fritz Island Flow Meter project, and continued construction work on the 42" Force Main project.

Anticipated work for January includes: discussions with DoJ, EPA, PaDEP regarding the amended Consent Decree, short listing of designers for the WWTP design, submission of a draft RFP for the WWTP design, continued construction work on the force main project, and bid opening and NTP for the cleaning of the secondary digesters.

A more detailed task breakdown of the December work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): reviewed the prospective designer's qualifications submittals; finalized the scope and began work on the WWTP designer RFP, including providing comments regarding the draft designer contract. Researched and provided recommendations to the client regarding permitting requirements of the WQM, Part II permit and Act 537 reimbursement requirements.
- Force Main (42"): assisted with construction-related project issues, including the pending micro-tunneling phase.
- Fritz Island Flow Meter: assisted with construction punch list items issues, including the disposition of the stockpiled soils and discussions regarding contractor substantial and final completion.
- Rehabilitation of Secondary Digesters: analyzed and prepared recommendations regarding the designer's schedule.
- Legal: participated in internal Municipality Agreement (IMA) and Amended Consent Decree strategy discussions/issues. Reviewed and provided comments to the draft WWTP designer contract.
- Project controls/administration functions: project team integration/correspondence/status, preparation of meeting Agenda/Action Items (WWTP Update), invoice/monthly reports, PM/CM Tasks/Budget worksheet and reconciliation, receive/respond to prospective vendor inquiries, and update the WWTP designer SharePoint ftp site.
- Reviewed the Draw Schedule and associated feeder reports provided by the City.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: project schedule updates, PM/CM Tasks and Costs spreadsheet updates, and year-end reconciliation, document management, extranet site management, invoice tracking log updates, and WWTP designer contract support.

Grant Funding (DMGS: no invoice this period):

- No billings this period

Primary Digester Design Support Services (H&S: also see invoice):

- Reviewed provided technical comments on the designer's (T&M) proposed schedule.
- Attended conference calls with project team as well as with T&M Associates.

Flow Meter Construction Management Services (Weston: also see invoice):

- Onsite inspection and project management for continued full time monitoring of Flowmeter project construction activities by Ronca.
- Communication and coordination with transportation and disposal contractors associated with the stockpiled soils; evaluation of associated Change Order from Contractor and subsequent comments and suggestions.
- Preparation of plan exhibiting placement of regulated fill material onsite; associated correspondences and communications with project team, including Ronca and PaDEP to finalize and execute identified plan.
- Discussions, planning, and coordination for project closeout activities.
- Subcontractor services (Corrpro Companies, Inc.) for inspection of salvaged sections of existing steel force main for purposes of determining potential re-use as spare parts.
- Laboratory services (Veritech) for analysis of excess stockpiled soil material generated from force main installation activities for purposes of determining proper means of disposal.
- Project controls, budgeting, planning, and reporting

Force Main 42" Construction Management Services (Weston: also see invoice):

- Inspection, project management, and monitoring of Force Main project construction activities by PACT.
- Preparation for and attendance at Force Main Progress Meeting No. 2 at the Solids Handling Building; Site walk and preparation of associated meeting minutes.
- Oversight of Shop Drawings and Pay Applications submitted by the General Contractor (PACT).
- Project controls, budgeting, planning and reporting.

WWTP Designer RFQ (H&S: also see invoice):

- Reviewed and evaluated the submitted RFQ packages.

- Attendance at proposal evaluation meeting with the City.
- Coordination with the City, Fox Rothschild and PM/CM Team.

WWTP Designer RFP (H&S: also see invoice):

- Initiated the development of the RFP document.



1) TASKS ACCOMPLISHED THIS PERIOD (OCTOBER, 2012):

- a) No fieldwork was scheduled for the month of October. As communicated on October 1, Woolpert was waiting for an executed Addendum #4 to continue. The executed Addendum #3 and #4 were received via email on October 15.
- b) Draft stormwater deliverables for Basins 12 and 19 were submitted on October 11.
- c) Draft stormwater deliverables for Basins 15 and 17 were submitted on October 25.
- d) Geodetic Control:
 - i) Woolpert was informed by the NGS that they have temporarily stopped accepting Blue Booking projects. The NGS is currently in the process of moving to a new adjustment, and are in the middle to testing data processing software. Once they have completed their testing, they will then make the software available to the public, and then begin accepting Blue Booking projects. It is currently estimated that they should be accepting Blue Booking projects sometime within the next 1-2 months.

2) ANTICIPATED WORK TO BE ACCOMPLISHED NEXT PERIOD (NOVEMBER, 2012):

- a) A field crew will be on-site between November 7 and November 21.
- b) Office processing of the remaining Basins will continue.
- c) Geodetic Control:
 - i) Woolpert will continue to follow up with the NGS.

3) MEETINGS:

- a) A general project meeting was held on October 2.
- b) No meetings are currently scheduled.

1) TASKS ACCOMPLISHED THIS PERIOD (NOVEMBER, 2012):

- a) A field crew was onsite between November 7 and November 19. Work included cleanup and QA/QC, additional total station surveying, and investigating various negative pipe slopes.
- b) Various review comments from November 7 were investigated and then edited within the database as necessary.
- c) Office processing continued for Basins 02, 16 and 18.
- d) Geodetic Control:
 - i) NGS did not yet begin accepting Blue Booking projects.
 - ii) Previously reported:
 - (1) Woolpert was informed by the NGS that they have temporarily stopped accepting Blue Booking projects. The NGS is currently in the process of moving to a new adjustment, and are in the middle to testing data processing software. Once they have completed their testing, they will then make the software available to the public, and then begin accepting Blue Booking projects. It is currently estimated that they should be accepting Blue Booking projects sometime within the next 1-2 months.

2) ANTICIPATED WORK TO BE ACCOMPLISHED NEXT PERIOD (DECEMBER, 2012):

- a) Basins 02, 16, and 18 will be delivered for review.
- b) No fieldwork is scheduled for December. Fieldwork will be scheduled following receiving review comments for the above mentioned Basins.
- c) Geodetic Control:
 - i) Woolpert will continue to follow up with the NGS.

3) MEETINGS:

- a) There were no meetings during this period.

1) TASKS ACCOMPLISHED THIS PERIOD (DECEMBER, 2012):

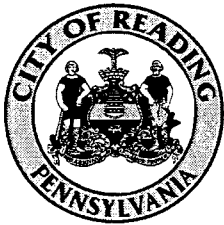
- a) Office processing was completed for Basins 02, 16 and 18.
Preliminary delivery of those Basins were made on December 20.
- b) There was no fieldwork during this period.
- c) Geodetic Control:
 - i) The NGS released their new data processing program,
allowing for Blue Book projects to be submitted.

2) ANTICIPATED WORK TO BE ACCOMPLISHED NEXT PERIOD (JANUARY, 2013):

- a) Woolpert will address any comments received from the City.
- b) Fieldwork is not currently scheduled for this period. Fieldwork will be scheduled following receiving the City's comments on the last stormwater preliminary submittals.
- c) Geodetic Control:
 - i) The vertical component to the project will be submitting to NGS for review and acceptance.
 - ii) The horizontal component to the project will be submitted in February.

3) MEETINGS:

- a) There were no meetings during this period.



CITY OF READING, PENNSYLVANIA

CHARLES M. JONES
PUBLIC WORKS DIRECTOR



PUBLIC WORKS
503 N. 6TH STREET
READING, PA 19601
(610) 655-6236

April 29, 2013

Certified Mail
Return Receipt Requested

Ms. Margaret L. Hutchinson, Esq.
Assistant United States Attorney
Civil Division Eastern District of Pennsylvania
615 Chestnut Street
Suite 1250
Philadelphia, PA 19106-4476

Re: City of Reading Consent Decree
Calendar Quarterly Progress Report
1st Quarter 2013

Dear Ms. Hutchinson:

In accordance with Section VI Reporting Requirements, Paragraph 41, you will find enclosed the City of Reading's Calendar Quarterly Report. This report documents progress and status on the implementation of Section V Remedial Measures described in Paragraphs 7 through 40. Please feel free to contact me at 610-655-6236 should you have any comments or questions.

Sincerely,

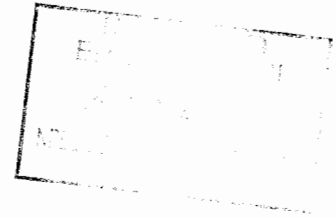
Charles M. Jones, PE
Public Works Director

CMJ/ts
Enclosure

C: Christopher A. Day, Esq., US EPA
✓ Lisa Trakis, US EPA
Edward J. Corriveau, P.E., PA DEP
Shawn Arbaugh, PA DEP
Carole Snyder, Managing Director
Deborah A.S. Hoag, P.E., Utilities Systems Manager
Ralph E. Johnson, P.E., Wasterwater Treatment Manager
Anthony C. Vesay, P.E., Hill International
Keith Mooney, Esq., Legal Counsel
John J. Miravich, Esq., Fox Rothschild
file



**City of Reading Consent Decree
Quarterly Progress Report
Period Ending March 31, 2013**



V. REMEDIAL MEASURES

A. General Duties

7. Duty to Comply with Permit – The City's wastewater treatment plant (WWTP) was in compliance with NPDES permit parameters.

8. Operation and Maintenance of the Facility – No change. The operation and maintenance ongoing program is implemented.

B. Interim Measures

9. Interim Compliance – Environmental Management System

(b) Maintenance Management System – No change. The WWTP computerized maintenance management system (CMMS) ongoing program is implemented.

(c) Supervisory Control and Data Acquisition (SCADA) System

1. Upgrades to the Interim SCADA System – No change. The WWTP SCADA system ongoing program is implemented.

2. Upgrades to the SCADA System – No change. This measure will be addressed under the Wastewater Treatment Plant upgrade.

(d) Pretreatment Data Management System – Continuing progress.

The City continues the use of a commercial pretreatment database as well as an abbreviated spreadsheet for simplicity and verification.

10. Interim Plant Influent Monitoring – No change. The plant influent monitoring ongoing program is implemented.

11. Interim Trickling Filter Performance Measures

(a) Performance Improvements – No change. The trickling filter performance measures ongoing program is implemented.

12. Process Control Testing – No change. The process control testing ongoing program is implemented.

13. Dangerous Gas Detection – No change. The gas detection ongoing program is implemented.

14. Certified Plant Operators – No change. The ongoing 24/7 qualified supervisor coverage is implemented.

15. Operations and Maintenance Plan – No change. The operations and maintenance plan remains in place and is annually reviewed and updated as appropriate.

16. Staffing Plan – No change. The ongoing 24/7 supervisor coverage is implemented. The ongoing communication process is implemented.

17. Interim Wet Weather Operational Strategy – No change. Please see the wet weather operation plan.

C. Long Term Evaluation and Construction Schedule – In addition to the Wastewater Treatment Plant this remedial measure reporting includes activities associated with pump stations, force mains and 537 planning.

The 42" flow-meter replacement project is substantially complete. The new flow meter tracked at approximately 3.5% lower than the existing Sixth and Canal Pump Station flow meter. Therefore, the flow and loading data used for the WWTP planning is confirmed to be reasonable.

The City's PaDEP 537 Planning Special Study is complete.

Construction has progressed on the City's new 42" force main (FM) project. Approximately 6,700 feet of new FM has been installed, the Angelica Creek crossing is complete and the tunneling under the Schuylkill River project has begun. Pending its condition, the existing FM is scheduled to be used for redundancy with limited lining of the river crossing only. The problem section of the existing FM is replaced and in service. Due to its high priority the City is requesting this new FM project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System. The project cost is \$9,738,500 and is being financed with a \$5,000,000 H2O grant and a PennVEST loan. There is also a FEMA/PEMA Hazard Mitigation grant application submitted.

The 42" force main (FM) emergency project that temporarily bypasses the problem section of the existing FM has been decommissioned. As stated in the paragraph above, the problem section of the existing FM was replaced and the replacement FM put into service. This was an interim measure to avoid leakage to the Schuylkill River.

The Sixth and Canal Pump Station (6&CPS) updated reevaluation is complete. A summary description of this project was submitted. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

Weston Solutions continues to work on the 6&CPS ground and groundwater contamination studies.

Hazen and Sawyer 19th Ward Pump Station (19WPS) assessment, alternatives evaluation and capital improvements plan is complete. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

The Anaerobic Digester Rehabilitation project has been started at the Wastewater Treatment Plant. T&M Associates is the selected engineer for the project.

Digesters' #4 and #5 cleaning bids were received in mid January 2013 and the lowest responsible, responsive bidder was Spectraserv. The cleaning of Digester #4 has commenced and is progressing. The scope of the project is to clean the two secondary digesters and rehabilitate both. We will also modify one of these two secondary digesters so it can be converted into a primary digester as needed. There is a \$1,000,000 H2O grant available toward this rehabilitation project.

18. Treatment Plant Alternatives Submission

(a) **Existing Plant Process Evaluation Report** – The updated Existing Plant Process Evaluation Report was submitted as part of the 537 Planning Special Study.

(b) **Evaluation of Treatment Alternatives Report** – The updated Evaluation of Treatment Alternatives was submitted as part of the 537 Planning Special Study.

19. Capital Improvements Plan – The updated technical Capital Improvements Plan was submitted as part of the 537 Planning Special Study, and the financial Capital Improvements Plan was submitted as a separate document.

20. Request for Proposals – Raftelis Financial Consultants is continuing to conduct the rate study and prepare a bond feasibility report.

The City shortlisted six of seven proposals in response to issuing a wastewater treatment plant designer request for proposals phase I. After holding meet and greet meetings the City sought phase II proposals from four potential designers. We interviewed the four phase II proposers and are now in the process of making a designer decision.

21. Permit Applications and Design – No report.

22. Permitting – No report.

23. Construction Completion – No report.

24. Start-Up and Operation – No report.

29. Wet Weather Operation Plan – No change. The ongoing wet weather operation plan is implemented and updated annually.

D. Collection System

25. GIS Mapping System - In progress. See below.

(a) **Purpose of GIS System** - Not applicable.

(b) **GIS Mapping of the Sanitary Sewer Collection System** – In progress. Phase One of the GPS project is the larger diameter sanitary sewer system required for the hydraulic modeling with Phase Two the remainder of the sanitary sewer collection. The City continued investigating problem locations in Phases One and Two identified by Woolpert who then surveyed those locations that were able to be resolved. Based on the best available mapping prior to the project, Woolpert located 107.8% of the anticipated manholes and 97.2% of the total sanitary features were located and inspected. More manholes were located than expected yet in some locations the anticipated manholes are still being investigated. Further project details are in the attached report. The City prioritized the investigation required as many of these manholes are in

Phase One along the interceptors required to perform hydraulic modeling. The City has been using CCTV and magnetic locating as well as cross-referencing between the design plans, existing GIS, and aerial imagery. Woolpert returned in the first quarter to capture features that are now located and accessible. Due to time limitations, their focus was on the sanitary sewers. As this project nears completion, the City is carefully reviewing the data base provided. The unified sanitary and storm database will be separated by system upon this current data delivery's complete review. City records for problems requiring action are not congruent with Woolpert's data summary for outstanding issues in Phases One or Two. A teleconference and further review are planned in the second quarter. Discussions have and will continue to include the long-term maintenance of the database with the differing scenarios requiring updates.

(c) GIS Mapping of the Storm Water Collection System - In progress. The third phase for field data collection and GIS mapping is the storm water system. This is included in the new GPS contract discussed above. Woolpert reached 81.9% of the anticipated features located and 98.1% of those inventoried. Anticipated features are estimated as the existing index maps do not indicate manholes and inlets in the system with actual counts varying greatly by basin from the estimated numbers. City crews worked to provide access as the crews move through the areas to reduce the follow-up required and have been working on the follow-up upon delivery into the tracking system.

26. Sanitary Sewer System Evaluation Program

(a) I/I Analysis by Subsystem

The City continued investigating and updating the mapping required for the coordination of the collection system investigative, modeling, and rehabilitative work.

1. Baseline Flow and Rainfall – In Progress. The hydraulic modeling of the interceptors is a key to re-evaluating priorities based on projected bottlenecks that may exist. The GIS inventory of the Phase One interceptors is required for this modeling.

2. Hydraulic Modeling – In Progress. The pilot and first phase of the GPS project discussed in paragraph 25(b) provide the information required for this hydraulic modeling. An enhanced scope of services to include this and other collection system engineering support is being developed to request proposals. The GPS Phase One necessary for the modeling is the area which had the most problems, especially with successive missing manholes. The City researched and located manholes to be inventoried in preparation for the modeling. Most of these are located in unpaved rights-of-way along railroad tracks as discussed above. Feature numbering for unique identification will occur following the inventory. This is also required for the computerized maintenance management system discussed below.

(b) Sewer System Evaluation Survey – In Progress. The sanitary manhole numbering system is refined continually as field inventory show additional or missing manholes and will continue as the inventory and system investigations progress and into the future.

The computerized maintenance management system implementation project progressed toward restarting full-scale for geospatially-oriented tracking of preventive and corrective maintenance as well as repairs. The City and Woolpert worked together on Cityworks software configuration for service requests, work orders, and projects to track personnel, equipment, materials, and contractors. The configuration is being set up to follow internal work flows and intradepartmental interfaces. Woolpert made software configuration updates with initial training scheduled for the first quarter. The software is currently available in a test environment for experience and troubleshooting. Final training and implementation will occur following the database separation.

After soliciting and evaluating proposals, the City awarded a contract to Woolpert to inspect and evaluate the sanitary sewer system's intermunicipal connection points and flow meters. Woolpert performed field investigation and observations at the points as determined through the Act 537 planning and intermunicipal agreement mapping processes. A draft report has been received with some major deficiencies noted relative to the meter accuracy evaluation. Additional formal comments will be incorporated and the connection point locations finalized with the municipalities prior to the report being finalized.

27. Rehabilitation Plan – No progress. *The SSES is required to be complete in order to develop the Rehabilitation Plan.*

28. Rehabilitation of Priority Areas of Collection System – No progress. *The rehabilitation plan is the precursor of this.*

29. Wet Weather Operation Plan – Completed.

E. Pretreatment Program

30. General Duty – In progress. The City has an approved pretreatment program and continues to regulate industrial users in the collection system. The prior Environmental Program (pretreatment) Coordinator retired in the fourth quarter of 2012 and a replacement was selected who began on January 1, 2013. He is experienced with the City's program and industries from having performed the sampling and analysis for more than 20 years.

31. Enforcement Response Plan (ERP) Implementation – In progress. The City continues to follow the ERP in order to encourage compliance from all industrial dischargers.

32. ERP - Penalty Escalation and Compliance Schedule – In progress and continuing. The City continues escalating penalties for all industries that are in significant non-compliance for a given parameter for two consecutive quarters. As penalty escalation had not been detailed in the ERP, the City has documented the process and amounts for consistency and as a reference tool.

33. ERP – Order, Permit Revocation, and Federal Referral – In progress. The City continues escalating the enforcement actions focusing on the financial penalties assessed to permittees who remain in significant non-compliance. The City continues to confer with US EPA while attempting to have industries achieve compliance. One industry has been problematic for an extended time following completion of a recent compliance agreement. US EPA requested additional information from the industry and has been speaking with the City regarding this permittee's recent compliance. The City met with an industry representative in the first quarter of 2012 to discuss recent compliance and plans for long-term attainment. During the second and third quarters, City and self-monitoring results yielded non-compliance and was communicated to US EPA. A joint unannounced inspection of the industry was completed in the third quarter. During the fourth quarter, the industry installed an automated skimming system they believe will address their non-compliance. To date, this cannot be determined due to the limited monitoring completed. However in the first quarter, the City received communication from a consultant indicating that another phase of pretreatment will be installed in the near future. The City anticipates continued communication with US EPA.

34. Local Limit Adoption by Contributing Municipalities – In progress. All the municipalities with permitted industries have adopted the ordinance. Electronic versions of the City's sewer use ordinance had been provided to each municipality, engineer, and/or solicitor to prepare for adoption. This requirement is detailed in the revised intermunicipal agreement being reviewed and executed by the contributing municipalities. During this quarter, a municipality revised their oil and grease ordinance to incorporate the same limits as the City has in its ordinance and includes in user permits.

35. Non-Residential Connection Evaluation and Investigation – In progress. The City has been working with the contributing municipalities to obtain this information to summarize, survey, and evaluate nonresidential users in the service area that may need to be permitted. A standardized method for routine reporting will be developed in cooperation with the municipalities.

36. Increased Monitoring for Violators – In progress and continuing. The City continues to increase City sampling and encourage increased self-monitoring for frequent violators. In general, permits may be amended or re-issued requiring multiple resamples for parameters with prior compliance issues. Some permits require increased frequency of monitoring for multiple quarters of compliance prior to returning to a less frequent self-monitoring schedule. Additional monitoring by both the City and the industry is tracked and reported annually.

37. Pretreatment Computerized Management System - In progress and continuing. The City continues data entry into a commercial pretreatment database as well as an abbreviated spreadsheet upon receipt of analytical results from both City and industrial sampling.

38. Local Limits Re-Evaluation – Completed. Evaluation submitted to US DoJ and US EPA on May 5, 2006. Comments were received from US EPA and the City initially worked with B&V to address the comments and concerns.

39. Quarterly SNC Reports to US EPA – In progress. The City has been monitoring penalty payment status and will continue to investigate errors in the penalty payment and posting as reported to the US EPA. The City is working interdepartmentally to resolve this issue for the past and determine how to do ongoing with accurate tracking and reporting in all systems as the goal. For 2012, there were significantly less errors noted so that some progress seems to have been made. We will continue to work to resolve this issue as specific entries and adjustments have been identified. There continue to be industries that are not current with their payment, but there are decreasing in number on the specific pretreatment report and overall when doing the investigative reviews.

F. Funding

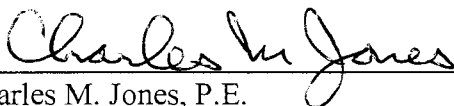
40. Funding – In progress. The 2013 budget was approved as presented to City Council with the budgeted transfer amount from the Sewer Fund to the General Fund remaining at \$3,000,000. In order to stabilize finances, this transfer will be taken periodically throughout the year.

VI. REPORTING REQUIREMENTS

41. Report Contents and Certification

- (a) **Remedial Measures Paragraphs 7 through 40** – See above numbered sections.
- (b) **Anticipated Problems** – See italics in above numbered sections.
- (c) **Additional Matters** – See italics in above unnumbered sections.
- (d) **Certification Statement** –

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete.



Charles M. Jones, P.E.
Public Works Director

4/29/13
Date

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

January, 2013

Executive Summary:

The PM/CM team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of January work included, short listing of designers for the WWTP design and finalization of the designer's Request for Proposals, Phase II (RfP), continued construction work on the force main project, and bid opening for the secondary digester rehabilitation project (cleaning phase).

Critical items of February work include: discussions with DoJ, EPA, PaDEP regarding the amended Consent Decree, issuance of the designer RfP for the WWTP upgrades, issuance of the NTP to the constructor for cleaning of the two secondary digesters, continued construction work on the force main project, including the mobilization of a second crew to begin work on the micro-tunneling phase, and Act 2 related work at the 6th and Canal Pump Station site.

A more detailed task breakdown of the January work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): assisted with the preparation and completion of the designer RfP; participated in Water Quality Management, Part 2 permitting discussions with sub consultant and client. Prepared a milestone analysis regarding the overall wwtp timeline.
- Force Main (42"): assisted with construction-related project issues, including the pending micro-tunneling phase and milestones, overall project schedule, additional staffing requirements, and contractor Pay Estimate (#2) review.
- Secondary Digester Rehabilitation: reviewed the designer's schedule and prepared initial draft comments.
- Legal: participated in internal Municipality Agreement (IMA) and Amended Consent Decree strategy discussions/issues. Reviewed and provided comments to the draft WWTP designer contract.
- Project controls/administration functions: project team integration/correspondence/deliverables status, preparation of meeting Agenda/Action Items (WWTP Update), invoice/monthly report, PM/CM Tasks/Budget worksheet and reconciliation, receive/respond to prospective vendor inquiries, and update the WWTP designer SharePoint ftp site.
- Prepared Draw Schedules for several project scenarios and assessed the impacts; participated in a client meeting to review the scenarios. Reviewed and updated the Construction Schedules.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: project construction schedule updates, PM/CM Tasks and Costs spreadsheet updates, document management, extranet site management, invoice tracking log updates, Draw Schedule, and WWTP designer RfP support.

Grant Funding (DMGS: no invoice this period):

- No billings this period

Primary Digester Design Support Services (H&S: also see invoice):

- Reviewed the proposed addendum to the construction bid and provided technical comments.

Flow Meter Construction Management Services (Weston: also see invoice):

- Laboratory services (Veritech) for analysis of excess stockpiled soil material generated from force main installation activities for purposes of determining proper means of disposal.
- Project controls, budgeting, planning, and reporting

Force Main 42" Construction Management Services (Weston: also see invoice):

- Inspection, project management, and monitoring of Force Main project construction activities by PACT.
- Preparation for and attendance at Force Main Microtunneling Meeting, subsequent site walk and meeting minutes preparation
- Reviewed and commented upon PACT schedule update.
- Management of Shop Drawings, RFIs, and Pay Applications submitted by the General Contractor (PACT).
- Project controls, budgeting, planning and reporting.

Act 2 Consulting Services at 6CPS (Weston: also see invoice)

- Discussion with the project team regarding Weston's summary report for the first round of groundwater elevation monitoring.

WWTP Designer RFP (H&S: also see invoice):

- Continued to develop the Phase II-RFP document.
- Associated coordination with the City, Fox Rothschild, and the PM/CM Team.

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

February, 2013

Executive Summary:

The PM/CM team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of February work included: issuance of the designer RfP and Addendum for the WWTP upgrades project, schedule review for the rehabilitation of the two secondary digesters, continued oversight for the construction work on the force main project, and Act 2 related work at the 6th and Canal Pump Station site.

Anticipated critical items of March work include: discussions with DoJ, EPA, PaDEP regarding the amended Consent Decree, review of the designer proposals for the WWTP upgrades, continued construction work on the force main project, and Act 2 related work at the 6th and Canal Pump Station site.

A more detailed task breakdown of the February work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): assisted with the finalization of the designer RfP and Addendum #1; began scoping the designer oversight scope with sub consultant.
- Force Main (42"): assisted with construction-related project issues, including the micro-tunneling phase and milestones, discharge permit and approach, and overall project schedule, including the submission of a timeline for PennVEST.
- Secondary Digester Rehabilitation: reviewed the designer's schedules, including the baseline schedule, provided comments, and participated in discussions with the project team.
- 6CPS (Act 2 Study); coordinated with and reviewed sub consultant's technical memo regarding the environmental conditions and recommended approach to the contaminants at the 6CPS site.
- Legal: Coordination with the legal team regarding the designer RfP; provided comments regarding the sample WWTP designer contract.
- Financial: participated in discussions with the PM's Grant coordinator regarding the designer RfP and the PaH2OII (digester) grant.
- Project controls/administration functions: project team integration/correspondence/deliverables status, preparation of draft meeting Agenda/Action Items (WWTP Update), invoice/monthly report, PM/CM Tasks/Budget worksheet and reconciliation, receive/respond to prospective vendor inquiries, and established and monitored the WWTP designer SharePoint ftp site, including discussions with City staff.
- Maintained a working copy of the Construction Schedules.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: PM/CM Tasks and Costs spreadsheet updates, document management, extranet site management, technical support and analysis for the secondary digester schedule, invoice tracking log updates, and WWTP designer RfP support, including technical support for the RfP and Addendum #1, as well as coordination with the short listed firms for site access and the posting of documents for the RfP.

Grant Funding (DMGS):

- Telephone and email communications regarding the City of Reading's H2O PA Grant II (digester).
- Work on a draft H2O PA Grant II Amendment Request

Primary Digester Design Support Services (H&S: also see invoice):

- Reviewed and provided comments on the proposed schedule submitted by T&M Associates.
- Participated in conference calls involving the PM/CM team and T&M Associates.

Force Main 42" Construction Management Services (Weston: also see invoice):

- On site inspection, project management, and monitoring of Force Main project construction activities by PACT.
- Review and comment upon PACT schedule submission.
- Preparation for and attendance at Progress Meeting #3.
- Geotechnical sub-consultant support for a special Micro tunneling meeting, including attendance and follow up support.
- Review and management of Shop Drawings, RFIs, and pay applications submitted by the General Contractor (PACT).
- Project controls, budgeting, planning and reporting.

Act 2 Consulting Services at 6CPS (Weston: also see invoice)

- Preparation and attendance for meeting at WWTP with City personnel and legal counsel to review environmental conditions and activities performed to date at 6&CPS, relationship with UGI, and pursuit of closure of Act 2.
- Preparation and attendance for meeting at UGI facility with City and UGI personnel to discuss 6&CPS activities and associated potential environmental impacts/costs.
- Prepared and issued a draft technical memorandum to City and PM for review. Memo summarized the environmental conditions, investigative activities, and administrative actions associated with the contamination issues.

WWTP Designer RFP (H&S: also see invoice):

- Finalized and submitted the designer RfP, Phase II to the City.
- Attended the pre-proposal meeting with the City and the short listed proposers.

- Worked with the City, Fox Rothschild, and the PM to compile responses to the Proposer questions.
- Finalized and issued Addendum No. 1.

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

March, 2013

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of March work included: receipt/review of designer proposals for the WWTP Upgrades Project, schedule review for the rehabilitation of the two secondary digesters, continued PM/CM support for the force main construction work, and Act 2 related work at the 6th and Canal Pump Station site.

Anticipated critical items of April work include: discussions with DoJ, EPA, PaDEP regarding the Amended Consent Decree, evaluation of the designer WWTP proposals and potential selection of the designer, continued construction work on the force main project, including commencement of the micro-tunneling operation, assistance with the secondary digester project, and Act 2 related work at the 6th and Canal Pump Station site.

A more detailed task breakdown of the March work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): assisted with the designer proposals and began developing a scope with sub-consultant for pending design oversight responsibilities.
- Force Main (42"): assisted with construction-related issues, including the micro-tunneling phase and milestones, discharge permit/approach, soils management, and project controls (e.g. submittals, change orders, schedule review, progress meetings). Site visit and coordination meeting w/ oversight team.
- Secondary Digester Rehabilitation: reviewed the designer's updated schedule, provided comments, and participated in discussions with the project team; reviewed the designer's monthly report.
- 6CPS (Act 2 Study); assisted sub consultant with the final technical memo which detailed the environmental conditions and provided a recommended approach to the contaminants at the 6CPS site.
- Legal: Coordination with the legal team regarding project related issues.
- Financial: participated in discussions with sub-consultant and assisted with a draft Amendment regarding the PaH2OII (digester) grant.
- Project controls/administration functions: project team integration/correspondence/deliverables status, preparation of draft meeting Agenda/Action Items (WWTP Update), invoice/monthly report, PM/CM Tasks/Budget worksheet and reconciliation, receive/respond to prospective vendor inquiries.
- Maintained a working copy of the Construction Schedules.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: PM/CM Tasks and Costs spreadsheet updates, document management, technical support and analysis for the secondary digester schedule, invoice tracking log updates.

Grant Funding (DMGS: also see invoice):

- Prepared a draft letter requesting an amendment to the H2O PA Grant II
- Revised draft letter per comments made by PM/CM team and City.

Primary Digester Design Support Services (H&S: also see invoice):

- Reviewed and provided comments on the proposed schedule submitted by T&M Associates.

Force Main 42" Construction Management Services (Weston, Hill: also see invoice):

- On site inspection, project management, and monitoring of Force Main project construction activities by PACT.
- Preparation for and attendance at Progress Meeting #4.
- Review, consultation, and technical support associated with the groundwater contamination at the 6CPS site.
- Review and management of Shop Drawings, RFIs, and pay applications submitted by the General Contractor (PACT).
- Project controls, budgeting, planning and reporting.

Act 2 Consulting Services at 6CPS (Weston: also see invoice)

- Incorporate client comments and prepare final technical memorandum on 6CPS contamination issues.
- Preparation for and attendance at a meeting at City Hall with City and legal counsel to review the technical memorandum.
- Following the meeting at City Hall, conducted internal discussions with project team. Began preparation of cost estimate for environmental activities associated with the 6CPS issues.

WWTP Designer RFP (H&S: also see invoice):

- Reviewed technical and cost proposals from four short listed firms.
- Attended a proposal evaluation meeting with the City.
- Prepared questions for and attended interviews with short listed firms.



1) TASKS ACCOMPLISHED THIS PERIOD (JANUARY-MARCH, 2013):

- a) A progress report for the month of December was submitted on January 7th.
- b) A field crew was onsite to resolve PRF's between February 4 and February 15.
- c) Following the PRF cleanup in February, the preliminary geodatabase for the entire system was submitted on March 15th for review.
- d) Geodetic Control:
 - i) The NGS requested a few additional GPS observations, which were completed on March 19th.
 - ii) Revised reports and data submittals were resubmitted to the NGS for approval at the end of March.

2) ANTICIPATED WORK TO BE ACCOMPLISHED NEXT PERIOD (APRIL, 2013):

- a) Woolpert will review and address any comments received from the City.
- b) Geodetic Control:
 - i) Woolpert will follow-up with the NGS to receive their final comments / acceptance of the geodetic submittal.
 - ii) If there are any necessary edits to be made, Woolpert will make the corrections and resubmit.

3) MEETINGS:

- a) There was a conference call on April 17th to discuss PRF's, remaining fieldwork, and database edits. From the call there were three follow-up to do items.
 - i) Traci / Mark: look for FM information in Area 18 and 19 so that Woolpert can digitize the missing FM. If Woolpert does not have the source, Woolpert will have to get it from the

City. Woolpert will not be digitizing the Flying Hills FM where markers were collected since it is not the City's system.

- ii) If the City provides Woolpert with a list of "DOES NOT EXIST" features, Woolpert will make sure to remove them from the GDB. (John G will work with Tim to review his list in comparison to the GDB).
- iii) John will follow up with Deb to set a schedule for the GDB final review.

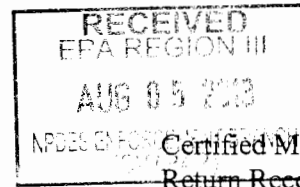


CITY OF READING, PENNSYLVANIA

PUBLIC WORKS
503 N. 6TH STREET
READING, PA 19601
(610) 655-6236

CHARLES M. JONES
PUBLIC WORKS DIRECTOR

July 31, 2013



Ms. Margaret L. Hutchinson, Esq.
Assistant United States Attorney
Civil Division Eastern District of Pennsylvania
615 Chestnut Street
Suite 1250
Philadelphia, PA 19106-4476

Re: City of Reading Consent Decree
Calendar Quarterly Progress Report
2nd Quarter 2013

Dear Ms. Hutchinson:

In accordance with Section VI Reporting Requirements, Paragraph 41, you will find enclosed the City of Reading's Quarterly Report. This report documents progress and status on the implementation of Section V Remedial Measures described in Paragraphs 7 through 40. Please feel free to contact me at 610-655-6236 should you have any comments or questions.

Sincerely,

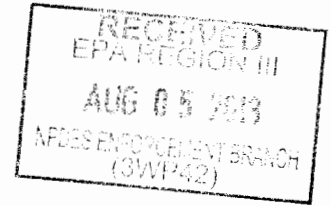
Charles M. Jones, PE
Public Works Director

CMJ/ts
Enclosure

C: Christopher A. Day, Esq., US EPA
Lisa Trakis, US EPA
Edward J. Corriveau, P.E., PA DEP
Shawn Arbaugh, PA DEP
Gary Hepford, P.E., PA DEP
Carole Snyder, Managing Director
Deborah A.S. Hoag, P.E., Utilities Systems Manager
Ralph E. Johnson, P.E., Wasterwater Treatment Manager
Anthony C. Vesay, P.E., Hill International
Keith Mooney, Esq., Legal Counsel
John J. Miravich, Esq., Fox Rothschild
file



**City of Reading Consent Decree
Quarterly Progress Report
Period Ending June 30, 2013**



V. REMEDIAL MEASURES

A. General Duties

- 7. Duty to Comply with Permit** – The City's wastewater treatment plant (WWTP) was in compliance with the NPDES permit parameters except for the May monthly average ammonia concentration.
- 8. Operation and Maintenance of the Facility** – No change. The operation and maintenance ongoing program is implemented.

B. Interim Measures

- 9. Interim Compliance – Environmental Management System**
 - (b) Maintenance Management System** – No change. The WWTP computerized maintenance management system (CMMS) ongoing program is implemented.
 - (c) Supervisory Control and Data Acquisition (SCADA) System**
 - 1. Upgrades to the Interim SCADA System** – No change. The WWTP SCADA system ongoing program is implemented.
 - 2. Upgrades to the SCADA System** – No change. This measure will be addressed under the Wastewater Treatment Plant upgrade.
 - (d) Pretreatment Data Management System** – Continuing progress. The City continues the use of a commercial pretreatment database as well as an abbreviated spreadsheet for simplicity and verification.
- 10. Interim Plant Influent Monitoring** – No change. The plant influent monitoring ongoing program is implemented.
- 11. Interim Trickling Filter Performance Measures**
 - (a) Performance Improvements** – No change. The trickling filter performance measures ongoing program is implemented.
- 12. Process Control Testing** – No change. The process control testing ongoing program is implemented.
- 13. Dangerous Gas Detection** – No change. The gas detection ongoing program is implemented.
- 14. Certified Plant Operators** – No change. The ongoing 24/7 qualified supervisor coverage is implemented.
- 15. Operations and Maintenance Plan** – No change. The operations and maintenance plan remains in place and is annually reviewed and updated as appropriate.
- 16. Staffing Plan** – No change. The ongoing 24/7 supervisor coverage is implemented. The ongoing communication process is implemented.
- 17. Interim Wet Weather Operational Strategy** – No change. Please see the wet weather operation plan.

C. Long Term Evaluation and Construction Schedule – In addition to the Wastewater Treatment Plant this remedial measure reporting includes activities associated with pump stations, force mains and 537 planning.

The 42” flow-meter replacement project is complete and we are working on closing out the contract.

Construction has progressed on the City’s new 42” force main (FM) project. The tunneling under the Schuylkill River is completed including the pipe installation and pipe testing. Pending its condition, the existing FM is scheduled to be used for redundancy with limited lining of the river crossing only. Due to its high priority the City is requesting this new FM project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System. The project cost is \$9,738,500 and is being financed with a \$5,000,000 H2O grant and a PennVEST loan. There is also a FEMA/PEMA Hazard Mitigation grant application submitted.

The Sixth and Canal Pump Station (6&CPS) updated reevaluation is complete. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

Weston Solutions continues to work on the 6&CPS ground and groundwater contamination studies.

Hazen and Sawyer 19th Ward Pump Station (19WPS) assessment, alternatives evaluation and capital improvements plan is complete. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

The Anaerobic Digester Rehabilitation project at the Wastewater Treatment Plant is continuing on schedule. T&M Associates is the selected engineer for the project. Digesters’ #4 and #5 were cleaned by Spectraserv and inspected by an engineer. The scope of the project includes rehabilitation of the two existing secondary digesters. We will also modify one of these two secondary digesters so it can be converted into a primary digester as needed. There is a \$1,000,000 H2O grant available toward this rehabilitation project.

18. Treatment Plant Alternatives Submission

(a) Existing Plant Process Evaluation Report – The updated Existing Plant Process Evaluation Report was submitted as part of the 537 Planning Special Study.

(b) Evaluation of Treatment Alternatives Report – The updated Evaluation of Treatment Alternatives was submitted as part of the 537 Planning Special Study.

19. Capital Improvements Plan – The updated technical Capital Improvements Plan was submitted as part of the 537 Planning Special Study, and the financial Capital Improvements Plan was updated and resubmitted as a separate document on June 28, 2013.

Raftelis Financial Consultants is refining the rate study they conducted and will be preparing a bond feasibility report.

20. Request for Proposals – No report.

21. Permit Applications and Design – The Part I permit application was submitted by the City to PaDEP as required.

The City has contracted with RK&K and started the design engineering of the “Plan B” WWTP.

22. Permitting – No report.

23. Construction Completion – No report.

24. Start-Up and Operation – No report.

29. Wet Weather Operation Plan – No change. The ongoing wet weather operation plan is implemented and updated annually.

D. Collection System

25. GIS Mapping System - In progress. See below.

(a) Purpose of GIS System - Not applicable.

(b) GIS Mapping of the Sanitary Sewer Collection System – Certified and continuing. The City transmitted a certification for the functionality of the GIS on June 28, 2013. The City will continue to work on improving the accuracy of the information and ensuring the information is kept current as changes are made to the collection system that impact the GIS. During this quarter, both the City and Woolpert performed work to ensure database accuracy and prepare for the separation from one unified database to separate databases and layers for wastewater and stormwater. The City has been using CCTV and magnetic locating as well as cross-referencing between the design plans, GIS, and aerial imagery to resolve inconsistencies and questions. Discussions have and will continue to include the long-term maintenance of the database with the differing scenarios requiring updates. Further project details are in the attached report.

(c) GIS Mapping of the Storm Water Collection System – Certified and continuing. The City transmitted a certification for the functionality of the GIS on June 28, 2013. The City will continue to work on improving the accuracy of the information and ensuring the information is kept current as changes are made to the collection system that impact the GIS. During this quarter, both the City and Woolpert performed work to ensure database accuracy and prepare for the separation from one unified database to separate databases and layers for wastewater and stormwater. Further project details are in the attached report.

26. Sanitary Sewer System Evaluation Program

(a) I/I Analysis by Subsystem

The City continued investigating and updating the mapping required for the coordination of the collection system investigative, modeling, and rehabilitative work.

1. Baseline Flow and Rainfall – In Progress. Additional flow metering will be performed and a recurring schedule discussed in conjunction with the calibration of hydraulic modeling, evaluation of the success of addressing extraneous flows, and the evaluation of the metering information received from others.

2. Hydraulic Modeling – In Progress. An enhanced scope of services to include this and other collection system engineering support is being finalized to request proposals.

(b) Sewer System Evaluation Survey – In Progress. The sanitary manhole numbering system is refined continually as field inventory show additional or missing manholes and will continue as the inventory and system investigations progress and into the future.

The computerized maintenance management system implementation project progressed toward restarting full-scale for geospatially-oriented tracking of preventive and corrective maintenance as well as repairs. The City and Woolpert worked together on Cityworks software configuration for service requests, work orders, and projects to track personnel, equipment, materials, and contractors. The configuration is being set up to follow internal work flows and intradepartmental interfaces. Woolpert made software configuration updates with initial training scheduled for the first quarter. The software is currently available in a test environment for experience and troubleshooting. Final training and implementation will occur following the database separation which is anticipated in the third quarter.

After soliciting and evaluating proposals, the City awarded a contract to Woolpert to inspect and evaluate the sanitary sewer system's intermunicipal connection points and flow meters. Woolpert performed field investigation and observations at the points as determined through the Act 537 planning and intermunicipal agreement mapping processes. A second draft report has been received and is under review. There are concerns regarding the extent the meter accuracy has been evaluated and the information obtained from contributors to do so. Additional formal comments will be incorporated and the connection point locations finalized with the municipalities prior to the report being finalized.

27. Rehabilitation Plan – No progress. *The SSES is required to be complete in order to develop the Rehabilitation Plan.*

28. Rehabilitation of Priority Areas of Collection System – No progress. *The rehabilitation plan is the precursor of this.*

29. Wet Weather Operation Plan – Completed.

E. Pretreatment Program

30. General Duty – In progress. The City has an approved pretreatment program and continues to regulate industrial users in the collection system.

31. Enforcement Response Plan (ERP) Implementation – In progress. The City continues to follow the ERP in order to encourage compliance from all industrial dischargers.

32. ERP - Penalty Escalation and Compliance Schedule – In progress and continuing. The City continues escalating penalties for all industries that are in significant non-compliance for a given parameter for two consecutive quarters. As penalty escalation had not been detailed in the ERP, the City has documented the process and amounts for consistency and as a reference tool.

33. ERP – Order, Permit Revocation, and Federal Referral – In progress. The City continues escalating the enforcement actions focusing on the financial penalties assessed to permittees who remain in significant non-compliance. The City continues to confer with US EPA while attempting to have industries achieve compliance. One industry has been problematic for an extended time following completion of a recent compliance agreement. US EPA requested additional information from the industry and has been speaking with the City regarding this permittee's recent compliance. The City met with an industry representative in the first quarter of 2012 to discuss recent compliance and plans for long-term attainment. During the second and third quarters, City and self-monitoring results yielded non-compliance and was communicated to US EPA. A joint unannounced inspection of the industry was completed in the third quarter. During the fourth quarter, the industry installed an automated skimming system they believe will address their non-compliance. To date, this cannot be determined due to the limited monitoring completed. However in the first quarter, the City received communication from a consultant indicating that another phase of pretreatment will be installed in the near future. During the second quarter, a site meeting was conducted with the industry, consultant, municipal authority, and the City. The industry has received final approvals required by the municipality and has begun construction with space allocated for further pretreatment if necessary in the future.

34. Local Limit Adoption by Contributing Municipalities – In progress. All the municipalities with permitted industries have adopted the ordinance. Electronic versions of the City's sewer use ordinance had been provided to each municipality, engineer, and/or solicitor to prepare for adoption. This requirement is detailed in the revised intermunicipal agreement being reviewed and executed by the contributing municipalities.

35. Non-Residential Connection Evaluation and Investigation – In progress. The City has been working with the contributing municipalities to obtain this information to summarize, survey, and evaluate nonresidential users in the service area that may need to be permitted. A standardized method for routine reporting will be developed in cooperation with the municipalities.

36. Increased Monitoring for Violators – In progress and continuing. The City continues to increase City sampling and encourage increased self-monitoring for frequent violators. In general, permits may be amended or re-issued requiring

multiple resamples for parameters with prior compliance issues. Some permits require increased frequency of monitoring for multiple quarters of compliance prior to returning to a less frequent self-monitoring schedule. Additional monitoring by both the City and the industry is tracked and reported annually. The merits of increased self-monitoring were discussed in a meeting with one industry during the second quarter.

37. Pretreatment Computerized Management System - In progress and continuing. The City continues data entry into a commercial pretreatment database as well as an abbreviated spreadsheet upon receipt of analytical results from both City and industrial sampling.

38. Local Limits Re-Evaluation – Completed. Evaluation submitted to US DoJ and US EPA on May 5, 2006. Comments were received from US EPA and the City initially worked with B&V to address the comments and concerns.

39. Quarterly SNC Reports to US EPA – In progress. The City has been monitoring penalty payment status and will continue to investigate errors in the penalty payment and posting as reported to the US EPA. The City is working interdepartmentally to resolve this issue for the past and determine how to do ongoing with accurate tracking and reporting in all systems as the goal. For 2012, there were significantly less errors noted so that some progress seems to have been made. We will continue to work to resolve this issue as specific entries and adjustments have been identified. There continue to be industries that are not current with their payment, but they are decreasing in number on the specific pretreatment report and overall when doing the investigative reviews.

F. Funding

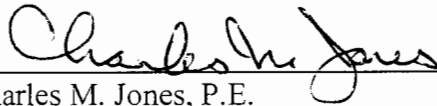
40. Funding – In progress. The 2013 budget was approved as presented to City Council with the budgeted transfer amount from the Sewer Fund to the General Fund remaining at \$3,000,000. In order to stabilize finances, this transfer has been taken periodically throughout the year. The development of the 2014 budget has begun with the budgeted transfer amount remaining at \$3,000,000.

VI. REPORTING REQUIREMENTS

41. Report Contents and Certification

- (a) **Remedial Measures Paragraphs 7 through 40** – See above numbered sections.
- (b) **Anticipated Problems** – See italics in above numbered sections.
- (c) **Additional Matters** – See italics in above unnumbered sections.
- (d) **Certification Statement** –

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete.



Charles M. Jones, P.E.
Public Works Director

7/31/13

Date

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

April, 2013

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of April work included: discussions with EPA/PaDEP regarding the Capital Improvements Plan (CIP), selection of a designer for the WWTP project, continued PM/CM support for the force main construction work, schedule review for the rehabilitation of the two secondary digesters, and Act 2 related work at the 6th and Canal Pump Station site.

Anticipated critical items of May work include: discussions with DoJ, EPA, PaDEP regarding the Amended Consent Decree, continued construction work on the force main project, assistance with the secondary digester project, and Act 2 related work at the 6th and Canal Pump Station site.

A more detailed task breakdown of the April work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): scope development with sub-consultant for pending design oversight responsibilities.
- Force Main (42"): assisted with construction-related issues, including the micro-tunneling phase and milestones, groundwater management, CIPP redundancy options, and project controls (e.g. submittals, DSC and sludge change order, schedule review, progress meetings, contractor invoice). Site visit and coordination meeting w/ oversight team.
- Secondary Digester Rehabilitation: reviewed the designer's updated schedule.
- 6CPS (Act 2 Study); assisted sub consultant with Act 2-related work: cost estimate, closure options, technical document review in preparation for sub consultant meeting with client and regulators.
- Legal: Coordination with the legal team regarding project related issues (e.g. CIP).
- Financial: participated in discussions with sub-consultant and assisted with a draft Amendment regarding the PaH2OII (digesters) grant; reviewed bond schedule and Capital Improvements Plan from financial consultant and prepared a draft Draw Schedule for the CIP.
- Project controls/administration functions: project team integration/correspondence/deliverables status, internal project scoping meeting, preparation of draft meeting Agenda/Action Items (WWTP Update), invoice/monthly report, PM/CM Tasks/Budget worksheet and reconciliation; identify future project requirements, update the System Costs slides for client

(Berks Economic Development), PLA discussions with City and internal team, and receive/respond to prospective vendor inquiries.

- Updated the Draw Schedule(s) and maintained a working copy of the Construction Schedules; assess Amended Consent Decree impacts and discuss with City staff.

Project Controls (Hill: also see invoice):

- Performed required project controls functions: PM/CM Tasks and Costs spreadsheet updates, Draw Schedule Quarterly Update including associated schedule updates and coordination with City, preparation for PM/CM team meeting, technical support and analysis for the secondary digester schedule.

Grant Funding (DMGS: also see invoice):

- Preparation of a draft letter and e-mailed to the City, regarding an extension to the PA H2O Grant I (force main).

Primary Digester Design Support Services (H&S: also see invoice):

- Reviewed and provided comments on the proposed schedule submitted by T&M Associates.

Force Main 42" Construction Management Services (Weston, Hill: also see invoice):

- On-site inspection, project management, and monitoring of Force Main project construction activities by the General Contractor /PACT Construction (GC).
- Preparation for and attendance at Progress Meeting #5.
- Review, consultation, and technical support, including laboratory services associated with the groundwater contamination at the 6CPS site.
- Review and management of Shop Drawings, RFIs, and pay applications submitted by the GC.
- Geotechnical sub-consultant review and comments on RFIs and shop drawings related to micro tunneling.
- Project controls, budgeting, planning and reporting.

Act 2 Consulting Services at 6CPS (Weston: also see invoice)

- Preparation of a cost estimate of design, consulting, and construction services performed as a result of the environmental conditions at the 6CPS site.
- Preparation for and attendance at a meeting at City Hall with City and legal counsel to review the environmental cost estimates.
- Review and preparation of the amended technical documents for distribution to PADEP and UGI.

WWTP Designer RFP (H&S: also see invoice):

- Provided technical assistance for the evaluation of proposals.
- Coordination with the City and the PM/CM Team.

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

May, 2013

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of May work included: initiation of the WWTP design, continued construction work on the force main project, assistance with the secondary digester project, and Act 2 related work at the 6th and Canal Pump Station site.

Anticipated critical items of June work include: discussions with DoJ, EPA, PaDEP regarding the Amended Consent Decree, continued work on the WWTP design, continued construction work on the force main project, assistance with the secondary digester project, and Act 2 related work at the 6th and Canal Pump Station site.

A more detailed task breakdown of the May work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): assistance with the wwtp design, including initial review of designer's proposed schedule and attendance at the kickoff meeting with the project team; scope refinement with sub-consultant for pending design oversight responsibilities; initial scoping for pending Value Engineering workshop.
- Force Main (42"): assisted with construction-related issues, including assistance to the designer regarding a differing site condition change order, and project controls (e.g. submittals, change order, schedule review, progress meetings/agenda coordination, contractor invoice). Site visit and coordination meeting w/ oversight team.
- Flow Meter (Fritz Island): assisted sub consultant and designer with flow meter commissioning and impacts to ongoing force main project.
- Secondary Digester Rehabilitation: reviewed and commented on the designer's updated schedule.
- 6CPS (Act 2 Study); assisted sub consultant with Act 2-related work: refinement of cost estimate, closure options, and preparation for client meeting with UGI.
- Legal: Coordination with the legal team regarding project related issues (e.g. CIP, digester schedule).
- Financial: reviewed previously submitted Capital Improvements Plan from financial consultant and prepared a draft Draw Schedule for the pending update to the CIP, including discussions with City's financial/rate study consultant (Raftelis); assisted sub consultant with potential PennWorks and PennVEST grants.
- Project controls/administration functions: project team integration/correspondence/deliverables status, preparation and attendance at the 5/10 WWTP Update meeting, invoice/monthly report, PM/CM Tasks/Budget

worksheet and reconciliation; identify future project requirements, prepare a WWTP design oversight (Advance) scoping document for client approval; receive/respond to prospective vendor inquiries.

- Updated the Draw Schedule(s) and maintained a working copy of the Construction Schedules.

Project Controls (Hill: also see invoice):

- Performed required Project Controls functions: refine Draw and Construction Schedule(s), scoping future project requirements and assessing staffing impacts, update of PM/CM Tasks and Costs spreadsheet, preparation of letters for new task order (WWTP Designer Oversight – Advance), technical support and analysis for the secondary digester schedule.

Grant Funding (DMGS: also see invoice):

- Performed research into PennWORKS, Alternative and Clean Energy, and PennVEST Programs and compiled applicable research into email.

WWTP Design Oversight (H&S: also see invoice)

- Preparation for and attendance at the Process Kick off meeting.
- Review of RK&K process alternatives.

Force Main 42" Construction Management Services (Weston, Hill: also see invoice):

- On-site inspection, project management, and monitoring of Force Main project construction activities by the General Contractor /PACT Construction (GC).
- Preparation for and attendance at Progress Meeting #6.
- Review and management of Shop Drawings, RFIs, construction schedule updates, and pay applications submitted by the GC.
- Project controls, budgeting, planning and reporting.

Act 2 Consulting Services at 6CPS (Weston: also see invoice)

- Refine cost estimate of design, consulting, and construction services performed as a result of the environmental conditions at the 6CPS site.
- Preparation for and attendance at a meeting at with City personnel, UGI, and Weston representatives to discuss 6&CPS environmental issues.

**City of Reading
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

June, 2013

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of June work included: submission of the Capital Improvements Plan (CIP), Amended Consent Decree (internal) discussions, continued work on the WWTP design, continued construction work on the force main project, assistance with the secondary digester design, and Act 2 related work at the 6th and Canal Pump Station site.

Anticipated critical items of July work include: discussions with DoJ, EPA, PaDEP regarding the Amended Consent Decree, continued support of the WWTP design, continued oversight of the force main construction project, assistance with the secondary digester design project, and Act 2 related work at the 6th and Canal Pump Station site.

A more detailed task breakdown of the June work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- WWTP (design): assistance with the WWTP design, including attendance at a design progress meeting on 6/20; review of designer's proposed schedule, coordination with sub consultant (Hazen & Sawyer), and prepare draft comments; scope refinement with sub-consultant and client for pending design oversight responsibilities; correspond with designer regarding second opinion requirements and scope VE requirements for a future workshop.
- Force Main (42"): assisted with construction-related issues, and project controls (e.g. submittals, schedule review, progress meetings/agenda coordination, and action item review, contractor invoice).
- Secondary Digester Rehabilitation: reviewed designer schedule, prepared comments--including coordinating comments from Hill scheduler and sub consultant--discussions with client, and final submission to project team.
- Legal: Reviewed and prepared comments regarding the draft Amended Consent Decree; coordination w/ legal team regarding the Amended Consent Decree and CIP submission to DoJ.
- Financial: reviewed, commented on several versions of the CIP from financial consultants and prepared a Draw Schedule for the update to the CIP; participated in several discussions with City's financial consultant and client. Researched and communicated potential PennWorks grant requirements to client.
- Project controls/administration functions: project team integration including action items, correspondence, deliverables status; preparation for and attendance at the 6/18 Amended Consent Decree (internal) meeting, invoice/monthly report preparation, PM/CM Tasks/Budget worksheet and reconciliation; ongoing

contract management including scoping, preparation, and submission of a contract Reconciliation Amendment. Research and coordination regarding a PLA study for the EOC; prepare and submit a capital spending forecast for client's Builder's Insurance Risk.

- Review project requirements and update the Draw Schedule(s), including correspondence with client regarding the Collection System requirements; review WWTP Draw Schedule requirements w/ client on 6/4. Maintained a working copy of the Construction Schedules.

Project Controls (Hill: also see invoice):

- Performed required Project Controls functions: Monthly report preparation, update of PM/CM Tasks and Costs spreadsheet, preparation of letters and supporting documents for Reconciliation Amendment V, review and finalize Single Page Draw Schedule for inclusion in the CIP, technical support and analysis for both the secondary digester and WWTP Designers' schedules.

WWTP Design Oversight (H&S: also see invoice)

- Preparation for and attendance at the Process Design meeting.
- Review of RK&K process alternatives
- Review of WWTP flow data and solids/mass balance issues

Primary Digester Rehab Design Support (H&S: also see invoice)

- Provided comments and review of designer schedule.

Force Main 42" Construction Management Services (Weston, Hill: also see invoice):

- On-site inspection, project management, and monitoring of Force Main project construction activities by the General Contractor /PACT Construction (GC).
- Preparation for and attendance at Progress Meeting #7
- Review and management of Shop Drawings, RFIs, and construction schedule updates, and pay applications submitted by the GC.
- Geotechnical services from sub-contractor from May operating period are included with this invoice.



1) TASKS ACCOMPLISHED THIS PERIOD:

- a) No review comments were received from the City during the month of April, therefore, no edits were made to the geodatabase.
- b) Geodetic Control:
 - i) The NGS has not yet commented or approved the reports submitted by Woolpert.

2) ANTICIPATED WORK TO BE ACCOMPLISHED NEXT PERIOD:

- a) Woolpert received comments on the geodatabase on May 16. Woolpert will review and address those comments received from the City.
- b) Geodetic Control:
 - i) Woolpert will follow-up with the NGS to receive their final comments / acceptance of the geodetic submittal.
 - ii) If there are any necessary edits to be made, Woolpert will make the corrections and resubmit.

3) MEETINGS:

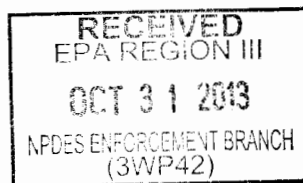
- a) There was a conference call on April 17th to discuss PRF's, remaining fieldwork, and database edits. From the call there were three follow-up to do items.
 - i) Traci / Mark: look for FM information in Area 18 and 19 so that Woolpert can digitize the missing FM. If Woolpert does not have the source, Woolpert will have to get it from the City. Woolpert will not be digitizing the Flying Hills FM where markers were collected since it is not the City's system.
 - ii) If the City provides Woolpert with a list of "DOES NOT EXIST" features, Woolpert will make sure to remove them from the GDB. (Received May 10th).

- iii) John will follow up with Deb to set a schedule for the GDB final review (Final review comments were received on May 16).



CITY OF READING, PENNSYLVANIA

RALPH E. JOHNSON
ACTING DIRECTOR OF
PUBLIC WORKS



PUBLIC WORKS
503 N. 6TH STREET
READING, PA 19601
(610) 655-6258

October 25, 2013

Certified Mail
Return Receipt Requested

Ms. Margaret L. Hutchinson, Esq.
Assistant United States Attorney
Civil Division Eastern District of Pennsylvania
615 Chestnut Street
Suite 1250
Philadelphia, PA 19106-4476

Re: City of Reading Consent Decree
Calendar Quarterly Progress Report
3rd Quarter 2013

Dear Ms. Hutchinson:

In accordance with Section VI Reporting Requirements, Paragraph 41, you will find enclosed the City of Reading's Quarterly Report. This report documents progress and status on the implementation of Section V Remedial Measures described in Paragraphs 7 through 40. Please feel free to contact me at 610-655-6258 should you have any comments or questions.

Sincerely,

Ralph E. Johnson, PE
Acting Director of Public Works

Enclosure

C: Christopher A. Day, Esq., US EPA

→ Lisa Trakis, US EPA

Shawn Arbaugh, PA DEP

Gary Hepford, P.E., PA DEP

Carole Snyder, Managing Director

Deborah A.S. Hoag, P.E., Utilities Systems Manager

Anthony C. Vesay, P.E., Hill International

Keith Mooney, Esq., Legal Counsel

John J. Miravich, Esq., Fox Rothschild

file



FAX: (610) 655-6034

**City of Reading Consent Decree
Calendar Quarterly Progress Report
Period Ending September 30, 2013**



V. REMEDIAL MEASURES

A. General Duties

- 7. Duty to Comply with Permit** – The City's wastewater treatment plant (WWTP) was in compliance with the NPDES permit parameters.
- 8. Operation and Maintenance of the Facility** – No change. The operation and maintenance ongoing program is implemented.

B. Interim Measures

9. Interim Compliance – Environmental Management System

- (b) Maintenance Management System** – No change. The WWTP computerized maintenance management system (CMMS) ongoing program is implemented.
- (c) Supervisory Control and Data Acquisition (SCADA) System**
 - 1. Upgrades to the Interim SCADA System** – No change. The WWTP SCADA system ongoing program is implemented.
 - 2. Upgrades to the SCADA System** – No change. This measure will be addressed under the Wastewater Treatment Plant upgrade.
- (d) Pretreatment Data Management System** – Continuing progress. The City continues the use of a commercial pretreatment database as well as an abbreviated spreadsheet for simplicity and verification.

10. Interim Plant Influent Monitoring – No change. The plant influent monitoring ongoing program is implemented.

11. Interim Trickling Filter Performance Measures

- (a) Performance Improvements** – No change. The trickling filter performance measures ongoing program is implemented.

12. Process Control Testing – No change. The process control testing ongoing program is implemented.

13. Dangerous Gas Detection – No change. The gas detection ongoing program is implemented.

14. Certified Plant Operators – No change. The ongoing 24/7 qualified supervisor coverage is implemented.

15. Operations and Maintenance Plan – No change. The operations and maintenance plan remains in place and is annually reviewed and updated as appropriate.

16. Staffing Plan – No change. The ongoing 24/7 supervisor coverage is implemented. The ongoing communication process is implemented.

17. Interim Wet Weather Operational Strategy – No change. Please see the wet weather operation plan.

C. Long Term Evaluation and Construction Schedule – In addition to the Wastewater Treatment Plant this remedial measure reporting includes activities associated with pump stations, force mains and 537 planning.

The 42" flow-meter replacement project is complete.

Pipeline work has been completed on the City's new 42" force main (FM) project, with the new force main being put into service 27 August 2013. The existing river crossing has been examined via video surveillance and its condition is being assessed by the Engineer. Due to its high priority the City is requesting this new FM project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System. The project cost is \$9,738,500 and is being financed with a \$5,000,000 H2O grant and a PennVEST loan.

The Sixth and Canal Pump Station (6&CPS) updated reevaluation is complete. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

Weston Solutions continues to work on the 6&CPS ground and groundwater contamination studies.

Hazen and Sawyer 19th Ward Pump Station (19WPS) assessment, alternatives evaluation and capital improvements plan is complete. Due to its high priority the City is requesting this project be considered one of three projects forming the completion of paragraph 28, Rehabilitation of Priority Areas of the Collection System.

The Anaerobic Digester Rehabilitation project at the Wastewater Treatment Plant is continuing on schedule. A change order has been approved, broadening the scope of the project to include the conversion of Digester #5 from secondary to primary digester service. There is a \$1,000,000 H2O grant available toward this rehabilitation project.

The Improvements to the Fritz Island WWTP project has begun design phase. The selected engineer is Rummel, Klepper & Kahl, LLP (RK&K) of York, PA. A project kick-off meeting was held with Plant personnel 30 May, 2013, and bi-weekly progress meetings on-going. RK&K's technical evaluation of the solids and liquids processes were summarized in preliminary design memoranda. RK&K is on-track for delivering their Basis of Design report (30% design) 20 November 2013. The City is pursuing PennVEST funding for this project.

18. Treatment Plant Alternatives Submission

(a) **Existing Plant Process Evaluation Report** – The updated Existing Plant Process Evaluation Report was submitted as part of the 537 Planning Special Study.

(b) **Evaluation of Treatment Alternatives Report** – The updated Evaluation of Treatment Alternatives was submitted as part of the 537 Planning Special Study.

19. Capital Improvements Plan – Raftelis has updated the Rate Study based upon feedback from the City, and are conducting an Affordability Analysis.

20. Request for Proposals – No report.

21. Permit Applications and Design – The draft NPDES permit renewal PA0026549 was included in the PA Bulletin, 21 September 2013. Design engineering of the “Plan B” WWTP by RK&K is ongoing.

22. Permitting – No report.

23. Construction Completion – No report.

24. Start-Up and Operation – No report.

29. Wet Weather Operation Plan – No change. The ongoing wet weather operation plan is implemented and updated annually.

D. Collection System

25. GIS Mapping System - In progress. See below.

(a) **Purpose of GIS System** - Not applicable.

(b) **GIS Mapping of the Sanitary Sewer Collection System** – Certified and continuing. The City transmitted a certification for the functionality of the GIS on June 28, 2013. The City will continue to work on improving the accuracy of the information and ensuring the information is kept current as changes are made to the collection system that impact the GIS. During this quarter, the City received from Woolpert the database separated from one unified database to separate databases and layers for wastewater and stormwater. The City reviewed and provided comments to Woolpert regarding the anomalies in the databases. Further details are in the attached report. The City has been using CCTV and magnetic locating as well as cross-referencing between the design plans, GIS, and aerial imagery to resolve inconsistencies and questions. Discussions have and will continue to include the continual updating and long-term maintenance of the database with the differing scenarios requiring updates.

(c) **GIS Mapping of the Storm Water Collection System** – Certified and continuing. The City transmitted a certification for the functionality of the GIS on June 28, 2013. The City will continue to work on improving the accuracy of the information and ensuring the information is kept current as changes are made to the collection system that impact the GIS. During this quarter, the City received from Woolpert the database separated from one unified database to separate databases and layers for wastewater and stormwater. The City reviewed and provided comments to Woolpert regarding the anomalies in the databases. Further details are in the attached report.

26. Sanitary Sewer System Evaluation Program

(a) I/I Analysis by Subsystem

The City continued investigating and updating the mapping required for the coordination of the collection system investigative, modeling, and rehabilitative work.

1. Baseline Flow and Rainfall – In Progress. Additional flow metering will be performed and a recurring schedule discussed in conjunction with the calibration of hydraulic modeling, evaluation of the success of addressing extraneous flows, and the evaluation of the metering information received from others.

2. Hydraulic Modeling – In Progress. An enhanced scope of services to include this and other collection system engineering support was advertised in August to request proposals. A mandatory pre-proposal meeting was also held in August with 23 firms attending. Proposals were received on September 12th from five teams representing eight firms in total. Following the City's professional services selection process including technical evaluation and scoring prior to price evaluation, the committee scheduled to meet with both the Managing Director and Mayor. City Council award is schedule for October 14th.

(b) Sewer System Evaluation Survey – In Progress. The sanitary manhole numbering system is refined continually as field inventory shows additional or missing manholes and will continue as the inventory and system investigations progress and into the future.

The computerized maintenance management system implementation project progressed toward restarting full-scale for geospatially-oriented tracking of preventive and corrective maintenance as well as repairs. The City and Woolpert worked together on Cityworks software configuration for service requests, work orders, and projects to track personnel, equipment, materials, and contractors. The configuration is being set up to follow internal work flows and intradepartmental interfaces. Woolpert made software configuration updates with initial training scheduled for the first quarter. The software is currently available in a test environment for experience and troubleshooting. With the geodatabase separation having been completed this quarter, the startup is anticipated during the fourth quarter.

After soliciting and evaluating proposals, the City awarded a contract to Woolpert to inspect and evaluate the sanitary sewer system's intermunicipal connection points and flow meters. Woolpert performed field investigation and observations at the points as determined through the Act 537 planning and intermunicipal agreement mapping processes. A second draft report has been received reviewed. There are concerns regarding the extent to which the meter accuracy has been evaluated and the information obtained from contributors to do so. Additional formal requests for municipal flow information were made. The connection point locations mapped by SSM Group were distributed for municipal review to

be finalized with the municipalities prior to the connection point and flow meter report being finalized.

27. Rehabilitation Plan – No progress. *The SSES is required to be complete in order to develop the Rehabilitation Plan.*

28. Rehabilitation of Priority Areas of Collection System – No progress. *The rehabilitation plan is the precursor of this.*

29. Wet Weather Operation Plan – Completed.

E. Pretreatment Program

30. General Duty – In progress. The City has an approved pretreatment program and continues to regulate industrial users in the collection system.

31. Enforcement Response Plan (ERP) Implementation – In progress. The City continues to follow the ERP in order to encourage compliance from all industrial dischargers.

32. ERP - Penalty Escalation and Compliance Schedule – In progress and continuing. The City continues escalating penalties for all industries that are in significant non-compliance for a given parameter for two consecutive quarters. As penalty escalation had not been detailed in the ERP, the City has documented the process and amounts for consistency and as a reference tool.

33. ERP – Order, Permit Revocation, and Federal Referral – In progress. The City continues escalating the enforcement actions focusing on the financial penalties assessed to permittees who remain in significant non-compliance. The City continues to confer with US EPA while attempting to have industries achieve compliance. One industry has been problematic for an extended time following completion of a recent compliance agreement. US EPA requested additional information from the industry and has been speaking with the City regarding this permittee's recent compliance. The City met with an industry representative in the first quarter of 2012 to discuss recent compliance and plans for long-term attainment. During the second and third quarters, City and self-monitoring results yielded non-compliance which was communicated to US EPA. A joint unannounced inspection of the industry was completed in the third quarter.

During the fourth quarter, the industry installed an automated skimming system they believe will address their non-compliance. This could not be confirmed based on monitoring completed. However in the first quarter of 2013, the City received communication from a consultant indicating that another phase of pretreatment will be installed with a site meeting conducted with the industry, consultant, municipal authority, and the City during the second quarter. The industry has received final approvals required by the municipality and has begun construction. Space is allocated for further pretreatment if necessary in the future.

34. Local Limit Adoption by Contributing Municipalities – In progress. All the municipalities with permitted industries have adopted the ordinance. Electronic versions of the City's sewer use ordinance had been provided to each municipality, engineer, and/or solicitor to prepare for adoption. This requirement is detailed in the revised intermunicipal agreement being reviewed and executed by the contributing municipalities.

35. Non-Residential Connection Evaluation and Investigation – In progress. The City has been working with the contributing municipalities to obtain this information periodically to summarize, survey, and evaluate nonresidential users in the service area that may need to be permitted. A standardized method for routine reporting will be developed in cooperation with the municipalities under the new intermunicipal agreement.

36. Increased Monitoring for Violators – In progress and continuing. The City continues to increase City sampling and encourage increased self-monitoring for industries with violations. In general, permits may be amended or re-issued requiring multiple resamples for parameters with prior compliance issues. Some permits require increased frequency of monitoring for multiple quarters of compliance prior to returning to a less frequent self-monitoring schedule. Additional monitoring by both the City and the industry is tracked and reported annually. The merits of increased self-monitoring were discussed in a meeting with one industry during the second quarter.

37. Pretreatment Computerized Management System - In progress and continuing. The City continues data entry into a commercial pretreatment database as well as an abbreviated spreadsheet upon receipt of analytical results from both City and industrial sampling.

38. Local Limits Re-Evaluation – Completed. Evaluation submitted to US DoJ and US EPA on May 5, 2006. Comments were received from US EPA and the City initially worked with B&V to address the comments and concerns.

39. Quarterly SNC Reports to US EPA – In progress. The City has been monitoring penalty payment status and will continue to investigate errors in the penalty payment and posting as reported to the US EPA. The City is working interdepartmentally to resolve this issue for the past and determine how to do ensure accurate tracking and reporting in all systems. There were significantly fewer errors noted so that some progress seems to have been made. We will continue to work to resolve this issue as specific entries and adjustments have been identified. There continue to be industries that are not current with their payment, but they are decreasing in number on the specific pretreatment report and overall when doing the investigative reviews.

F. Funding

40. Funding – In progress. The 2013 budget was approved as presented to City Council with the budgeted transfer amount from the Sewer Fund to the General Fund remaining at \$3,000,000. In order to stabilize finances, this transfer has been taken periodically throughout the year. The Administration submitted the 2014 budget to City Council with the budgeted transfer amount remaining at \$3,000,000.

VI. REPORTING REQUIREMENTS

41. Report Contents and Certification

- (a) **Remedial Measures Paragraphs 7 through 40** – See above numbered sections.
- (b) **Anticipated Problems** – See italics in above numbered sections.
- (c) **Additional Matters** – See italics in above unnumbered sections.
- (d) **Certification Statement** –

I certify under penalty of law that this information was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my directions and my inquiry of the person(s) who manage the system, or the person(s) directly responsible for gathering the information, the information submitted, is to the best of my knowledge and belief, true, accurate, and complete.

Ralph E. Johnson
Acting Director of Public Works

10/25/13
Date

City of Reading
July 2013
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of July work included: continued support of the WWTP and secondary digester designs, continued oversight of the force main construction project, and Act 2 related work at the 6th and Canal Pump Station site (6CPS).

Anticipated critical items of August work include: continued design oversight work for the WWTP upgrades and secondary digesters rehabilitation, continued construction management services for the force main project, and Act 2 related work at 6CPS.

A more detailed task breakdown of the July work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- Project Management: review project requirements and update the Draw Schedule, including forecasting future project requirements; maintained a working copy of the Construction Schedules, including programming of pending pump station upgrades—6CPS and 19th Ward.
- WWTP (design): assistance with the WWTP design, including review of “Design Considerations” and “Adders,” meeting agendas, minutes/action items, and coordination w/ sub consultant (Hazen & Sawyer). Detailed review/analysis and comments of designer’s baseline schedule. Coordination w/ sub consultant regarding scope and requirements refinement for pending design oversight responsibilities.
- Force Main (42”): assisted with construction-related issues, and project controls (e.g. submittals, schedule review, progress meetings/agenda coordination, action item review, and contractor invoices).
- Secondary Digester Rehabilitation: reviewed designer schedule, including coordinating comments from Hill scheduler and sub consultant--discussions with client, and submission to project team.
- 6CPS: Capital Improvements Plan review, initial scoping of design oversight requirements and programming of two-phased project as part of the Draw Schedule; assistance to sub consultant regarding Act 2 site closure options, incurred/projected environmental costs, and discussions regarding negotiations w/ UGI.
- Legal: Reviewed and prepared comments regarding the two drafts of the Amended Consent Decree to Fox Rothschild; reviewed the DoJ Quarterly Report and coordinated it with current project status and the Amended Consent Decree.

- Financial: researched and corresponded with client regarding Second Opinion grant/loan requirements.
- Project Controls/Administration functions: project team coordination and integration including action items, correspondence, deliverables status; preparation for and attendance at the 7/26 project update meeting; research, coordination regarding a PLA Study for the EOC and participation in a teleconference with City representatives. Invoice/monthly report preparation; contract management, including completion of an internal audit of previous contract adjustments; PM/CM Tasks/Budget worksheet reconciliation.

Project Controls (Hill: also see invoice):

- Performed required Project Controls functions: Monthly Report preparation; quarterly Draw Schedule update; finalize an internal contract audit and update the PM/CM Tasks and Costs spreadsheet; assistance with Design Oversight requirements, including a detailed review of previous effort expended on Design Review/Tech Support under “Plan A” and comparison to proposed effort. Technical support and analysis of the Secondary Digester schedule.

WWTP Design Oversight (H&S: also see invoice)

- Review and comment on RK&K proposed schedule.
- Review of RK&K contract alternatives.
- Review of WWTP peak flow data.
- Preparation for and attendance of conference call related to solids/mass balance.

Primary Digester Rehab Design Support (H&S: also see invoice)

- Provided comments and review of designer schedule.

Force Main 42” Construction Management Services (Weston: also see invoice):

- On-site inspection, project management, and monitoring of Force Main project construction activities by the General Contractor /PACT Construction (GC).
- Preparation for and attendance at Progress Meeting #8
- Review and management of Shop Drawings, RFIs, and construction schedule updates, and pay applications submitted by the GC.
- Coordination with PaDEP to receive conditional approval to place excavated soils from the 6&CPS site directly as backfill without undergoing a Clean Fill Policy characterization process.
- Geotechnical services from sub-contractor from May operating period are included with this invoice.

Act 2 Consulting Services at 6CPS (Weston: also see invoice):

- Preparation for and attendance at a meeting with City to discuss the status of the process of Act 2 site closure, costs associated with environmental investigations, and recommendations for next steps on communicating with UGI.

City of Reading
August 2013
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of August work included: continued design oversight work for the WWTP upgrades and secondary digesters rehabilitation, and continued construction management services for the force main project.

Anticipated critical items of September work include: discussions with the regulators regarding the Amended Consent Decree, discussions w/ PennVEST/PaDEP regarding loan/grant funding for the WWTP upgrades, continued design oversight work for the WWTP upgrades and secondary digesters rehabilitation, continued construction management services for the force main project, and Act 2 related work at 6CPS as well as scoping for the Phase 1 improvements to the 6CPS.

A more detailed task breakdown of the August work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- Project Management: review project requirements and update the Draw Schedules; maintained a working copy of the Construction Schedules, including assessing the impact of new work (i.e. Secondary Digester #5).
- WWTP (design): assistance with the WWTP design, including subcontractor coordination (Hazen & Sawyer) regarding "Design Considerations", "Adders," meeting agendas, minutes/action items, and 6CPS upgrades, secondary digester rehab coordination. Review designer amendment and assess impacts to other work at Fritz Island and impacts to the Draw Schedule. Review of designer's schedule from 8/8; initial coordination w/ Hill scheduler and sub consultant (H&S) regarding designer's 8/30 schedule. Review sub consultant design oversight scope for pending client discussions on 8/9.
- Force Main (42"): assisted with construction-related issues, and project controls (e.g. submittals, schedule review, progress meetings/agenda coordination, action item review, and contractor invoice).
- Secondary Digester Rehabilitation: review designer schedule, dated 7/26, including coordinating comments from Hill scheduler and sub consultant, and assessing impacts to overall construction schedule; discussions with client, and submission to project team. Review designer project update memo.
- Legal: Review Amended Consent Decree, and confirm Collection System deliverable dates.
- Project Controls/Administration functions: project team coordination and integration including action items, correspondence, deliverables status;

preparation of draft meeting Agendas ((8/9, 8/23); meetings were not held); invoice/monthly report preparation; contract management, including PM/CM Tasks/Budget worksheet reconciliation.

Project Controls (Hill: also see invoice):

- Performed required Project Controls functions: Monthly Report preparation; quarterly Draw Schedule update including preparation of a Summary/One Page Draw Schedule; update the PM/CM Tasks and Costs spreadsheet. Technical support and analysis of the Secondary Digester schedule. Technical support and analysis of the RKK WWTP baseline schedule submission.

WWTP Design Oversight (H&S: also see invoice)

- Prepared for and attended two Process Design meetings.
- Performed a technical review of the Solids and Liquids Technical Memorandums.
- Coordinated with the City and PM/CM Team.

Primary Digester Rehab Design Support (H&S: also see invoice)

- Reviewed and provided comments on the designer's schedule.

Force Main 42" Construction Management Services (Weston: also see invoice):

- On-site inspection, project management, and monitoring of Force Main project construction activities by the General Contractor /PACT Construction (GC).
- Review and management of Shop Drawings, RFIs, and construction schedule updates, and pay applications submitted by the GC.
- Geotechnical services by sub-contractor from June 2013 operating period are included with this invoice.
- Project controls, budgeting, planning, and progress reporting.

**City of Reading
September 2013
Wastewater Treatment Plant Upgrades
PM/CM Monthly Progress Report
Hill/Weston/Hazen and Sawyer**

Executive Summary:

The Project Management/Construction Management (PM/CM) team continued work on Consent Decree related tasks as well as other supporting Wastewater Treatment Plant (WWTP) tasks. Critical items of September work included continued design oversight work for the WWTP upgrades and secondary digesters rehabilitation projects, continued construction management services for the force main project, scoping for the Phase 1 improvements to the 6CPS, and continued project management/controls tasks integrating the effort.

Anticipated critical items of October work include: discussions w/ PennVEST/PaDEP regarding loan/grant funding for the WWTP upgrades, continued design oversight work for the WWTP upgrades and secondary digesters rehabilitation projects, continued construction management services for the force main project, Act 2 related work at 6CPS, scoping for the Phase 1 improvements to the 6CPS, and project management/controls.

A more detailed task breakdown of the September work effort is included in the respective PM/CM's subcontractor invoices/reports.

Project Management (Hill: also see invoice):

- Project Management: review project requirements and update the Draw Schedules, including a meeting w/ client on 9/13 to discuss impacts; maintained a working copy of the Construction Schedules. Prepared/submitted Amended Consent Decree Comparison Schedules per client request. Prepared separate Draw Schedule scenarios for several Collection System program scenarios and submit to client.
- WWTP (design): assistance with the WWTP design, including subcontractor coordination (Hazen & Sawyer) regarding submission of designer's Liquids, Solids Technical Memorandums. Review of designer's schedule from 8/27, including coordination w/ client, Hill scheduler and sub consultant (H&S); submission of comments to project team on 9/17.
- Force Main ("42"): assisted with construction-related issues, and project controls (e.g. submittals—flood wall, lining of redundant pipe, including discussions w/ designer--schedule review, progress meetings/agenda coordination for meetings #8, #9, #10, and action item review). Site visit on 9/13 and project discussions w/ sub consultant (Weston).
- Secondary Digester Rehabilitation: review designer schedule, dated 8/30, including coordinating comments from Hill scheduler and sub consultant, and assessing impacts to overall construction schedule; discussions with client, and submission of comments to project team on 9/19. Review designer project update memo, dated 9/4.

- 6CPS: review/discussions/editing of sub consultant's (H&S) scoping document for Phase 1 improvements. Discussions w/ sub consultant regarding issues and next steps regarding the on-site contamination.
- Project Controls/Administration functions: project team coordination/integration including action item review, correspondence, and deliverables status. Preparation of meeting Agendas (9/13, 9/27); attendance at 9/13 update meeting (9/27 meeting was not held), invoice/monthly report preparation; contract management, including PM/CM Tasks/Budget worksheet reconciliation.

Project Controls (Hill: also see invoice):

- Performed required Project Controls functions: Assisted with the preparation of the comparative Amended Consent Decree/Construction and Collection System schedules. Assisted with the preparation of multiple programming scenarios regarding Collection System projects; assessed the impacts and finalized the respective summary Draw Schedules. Performed contract administration tasks. Technical support and analysis of T&M's Secondary Digester schedule. Technical support and analysis of RKK's WWTP baseline, version 2, schedule. Monthly Report preparation.

WWTP Design Oversight (H&S: also see invoice)

- Prepared for and attended Process Design meetings.
- Performed a technical review of the Solids and Liquids Technical Memorandums.
- Reviewed and commented upon designer's schedule.
- Coordinated with the City and PM/CM Team.

Primary Digester Rehab Design Support (H&S: also see invoice)

- Reviewed and provided comments on the designer's schedule.

Force Main 42" Construction Management Services (Weston: also see invoice):

- On-site inspection, project management, and monitoring of Force Main project construction activities by the General Contractor /PACT Construction (GC).
- Review and management of Shop Drawings, RFIs, and construction schedule updates, and pay applications submitted by the GC.
- Prepared for and attended progress meetings with the contractor and meetings with City and design team to discuss construction issues.
- Project controls, budgeting, planning, and progress reporting.

Act 2 Consulting Services at 6&CPS (Weston: also see invoice):

- Attended a meeting with City project personnel and City legal counsel regarding process for Act 2 site closure and costs associated with the 6&CPS investigations.



- a) In July additional revisions to the geodatabase were identified about some specific features. Various conference calls were used to resolve the issues.
- b) On August 16 a split geodatabase was posted to the Woolpert FTP site. Woolpert received comments on the split geodatabase on August 30. Woolpert responded to the comments on September 6.
- c) On September 12 there was a conference call to review all comments and questions about the split geodatabase.
- d) On October 3 there was a conference call to discuss a few common features between the two utility systems.
- e) On October 11, Woolpert posted the final split geodatabase to Woolpert's FTP site.
- f) Geodetic Control:
 - i) The project has been completely approved by the NGS. All control is now in the National Spatial Reference System (NSRS) and the control information can be downloaded from the NGS.